

Take Back the Earth –  
The Dumb, Greedy  
Incompetents  
Have Trashed It

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Swiatek Press

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This book is dedicated to the people of Bellevue,  
Love Canal, Rocky Flats and all the other areas  
where corporations and the government have  
polluted the land, water and air and caused sickness  
and death to the inhabitants of those communities.

also by Robert S. Swiatek

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*I Don't Want to be a Pirate – Writer, maybe  
wake up – it's time for your sleeping pill*

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## Introduction

Over the last hundred years, many inventions and innovations have been introduced to simplify our lives. The washboard and basin were replaced by the washing machine, making laundry a great deal easier. The horse gave way to the automobile, and the refrigerator, with its freezer compartment, made iceboxes obsolete. Radio was not eliminated but television made a permanent appearance that changed all our lives. Soon we had color TV, cable, the VCR, satellite dishes, DVD players and more recently, high definition television. The movie theater is still as strong as ever despite the introduction of home movies by way of cable, the videocassette and the DVD. The slide rule was made obsolete by the calculator, which is still around but seems to be giving way to the personal computer. Some people still read newspapers in the same way our great grandparents did, while many now peruse them online, through the Internet. The telephone has evolved into the cell phone and we now have phone messages, call waiting, caller ID, caller ID block, call forwarding and teleconferencing.

These are just a handful of the advances. It would take volumes to cover all of the other creations. Some are timesavers and are appreciated, but most likely, we would be better off without the others. Some have disrupted family life, and others have created zombies out of normal people. People can't live without some of them, but these products weren't around a decade ago and yet humanity survived. The majority of people claim they can't live without the cell phone, while at the same time over fifty percent surveyed said that this is one item which should never have been created.

A great many of the innovations have had or will soon have a devastating effect on the planet. At one time the automobile was a luxury, but Henry Ford changed that so that just about anyone could own a car. This progressed to

the point where many people now own a few, even though you can only drive one at a time, and these people aren't car collectors. Thanks to vehicles on the highway, the hole in the ozone layer has gotten larger and global warming is a very serious threat to the planet. Without the auto, many wars could have been avoided, specifically in the Middle East. Not all that the automobile has done for society has been good.

Besides the innovations and in many cases because of them, we have heard about the atom bomb, the Exxon Valdez, Three Mile Island, Chernobyl, Bhopal, Cancer Alley, Love Canal and 9/11. An accident such as what occurred at the nuclear installation in eastern Pennsylvania should have been a lesson for others in the industry, but apparently it wasn't, since an even larger disaster occurred at Chernobyl. The earth is very resilient, but after a while, there's just so much it can tolerate.

The oil spill off the coast of Alaska was repeated in the year 2004 and there will be more spills in the future. Lois Marie Gibbs struggled in her home in Niagara Falls over a quarter century ago, but towns all over the world now have their own Love Canals to deal with, some even more disastrous. When it comes to the environment, people who don't learn from history have a good chance of getting sued.

The last one hundred years have witnessed two World Wars, the Korean War, Vietnam, multiple wars in Iraq and Afghanistan and many not as significant but still devastatingly harmful encounters between nations and even within countries. There is no greater danger to the planet than the endless wars that are used as a way of settling differences.

Something needs to be done to save the earth. We really can't put it off until tomorrow. Rachel Carson talked about just this issue in her book, *Silent Spring*, which was published almost a half century ago. Few if any people listened to her warning. Living in an area that has become a

dumping ground for all kinds of toxic wastes, I was inspired to write this work. It gets into some of the environmental disasters of our time, specifically war and industrial pollution. Suggestions are made to make the planet a better place for humans to live. The book is intentionally not a long one, as I want to get as many people to read it as possible.

Corporations have to realize that it is not in their best interest to create some of the products they do. They must also see that it does them no good to dump their poisonous wastes with the hope that no one will bring a lawsuit against them. At the same time, we the citizens of the world need to pitch in and do our part. You may think that your small contribution won't be significant or make any difference, but it will. If we all work together, we can "Take Back The Earth."



## 1. Oh, say, can you see

If it weren't for one invention – gunpowder and all its *derivatives* – I wouldn't be writing this chapter. That last word is a Wall Street word, and not a good one, as far as I am concerned. However, canon balls, bullets, bombs and mortars aren't welcome, either.

You may object on the basis that we all have a right to bear arms. That may be true, but there is no right, that I know of, that says you can drop a bomb or two on a belligerent nation to save lives. Where does a leader get the right to attack a country and bomb it based on the fear or suspicion that the latter just might attack the aggressor? With that attitude, there won't be any people left, nor will there be a planet in which anything could survive. Pre-emptive attacks might indicate that the person who thought it up has an empty brain.

When Washington, Jefferson and Adams wrote documents that succeeding generations would abide by, I'm sure it was with the understanding that an adequate interpretation to account for the times had to be considered. Common sense should not be tossed out the window.

I should talk about “What if?” That phrase was a part of a campaign by one of the large American banks a few years ago. I even worked two contracts as a software consultant for that wonderful bank some time ago. I could ask, “What if corporate America cared for their employees and adequately compensated them for their efforts rather than downsizing the workforce and outsourcing jobs, because of greed?”

“What if executives acted ethically rather than opting for some of the practices and results of a few banks and companies such as Global Crossing, Enron, Adelphia and Arthur Anderson, for starters?” I could go on but I will let you think about some of the possibilities that we could be experiencing today had gunpowder not been invented.

People could still club and beat you or stab you with a knife, but you certainly would have a better chance for survival. I will admit that you do have a chance to get away when the shooter is reloading.

Of the worst innovations of all time, a few of them actually had great potential and could have been very beneficial to mankind. In my opinion, the ultimate worst descendant of gunpowder – it had some value – has to be the bomb. This includes the atom bomb, neutron bomb, hydrogen bomb and any weapon that can inflict damage on human beings and the land, water and air. You can read more about the process of bomb creation in ***Making a Real Killing*** by Len Ackland. I'd advise you not to read it before sitting down to eat, unless you've never had a problem at the dinner table, even when times are difficult.

With World War II in full swing, the Manhattan Project began in 1942. It was so named after the borough in New York City where its offices were located. Its aim was to create a weapon that could be used in war to effect victory. A group of scientists and physicists secretly gathered in Los Alamos, New Mexico and began work on their project, the atom bomb. They succeeded in their mission, but were not successful. If you disagree with that last statement, ask the Japanese and the environment, with both suffering greatly from the bombs dropped on Hiroshima and Nagasaki.

The Manhattan Project officially ended in 1947, but the troubles continued. World War II ended, while a new one began, the Cold War, and the world was rapidly changing. The feeling was that you needed to have an infinite supply of nuclear weapons just to assure your enemies that all the weapons would not be used. In other words, by having them you would never have to use them, and there would never be a nuclear war. However, if you didn't have this arsenal, the world could face annihilation. Remember that the atom bomb was used so that lives would be saved! Both feelings

remind me of the ad that preaches, “The more you spend, the more you save.” Those are all examples of “great” logic.

This prevailing bit of “wisdom” about having these weapons is called “deterrence.” However, wouldn’t the elimination of all nuclear weapons be a more reasonable approach since so many resources could be saved as well as the people and the environment? But that was not the choice that was made. I am not sure what type of thought processes – if any – enabled this decision, but it certainly wasn’t arrived at through the courses I took.

Over a half century ago the result was a handful of weapons plants across the country in such places as the Hanford Reservation in the state of Washington, Oak Ridge in Tennessee, Ellenton, South Carolina, the home of the Savannah River plant and Los Alamos, New Mexico. Each of these facilities helped developed weapons of mass destruction (WMD). If you were to compare these final products to the bombs dropped on Japan during World War II, it would be like comparing a stick of dynamite to a cherry bomb. The power of the new bombs was enormous.

The Korean War began in the early 1950s just after World War II ended. Russia was the new enemy. Hence, there was a need for all these weapons. The government made the decision on the location of the production plants and eventually decided to use an area not far from the city of Denver for one facility. This was done for numerous reasons and the place was sixteen miles northwest of the city in an area called Rocky Flats.

Headlines in the Denver Post on March 23, 1951 read, “U.S. to Build \$45 Million A-Plant Near Denver.” I doubt that the *A* stood for appliances. The area was selected for a variety of reasons and this also meant plenty of high paying jobs and a great boost to the economy of the region. The Atomic Energy Commission (AEC) administered the nuclear enterprise and Dow Chemical was the corporation in charge of operating the plant. This bomb process went on

from 1952 to 1989, and as of 1999 the facility still held 14.2 tons of plutonium.

In the beginning what exactly would be taking place on location was not generally known to the public. All they saw was a great work opportunity and progress, but none of the side effects, which would come later. When representatives of the AEC were asked if bombs were being built at Rocky Flats, they refused to answer on the grounds of national security. In fact the AEC and Dow Chemical put a tight security lid on the whole situation in the area that would go virtually unchallenged for seventeen years.

There was also deception in the early 1940s when medical scientists injected eighteen men and women with plutonium to study its effects on the body. Most of the subjects were not informed of what was happening. It's ironic, but in a way, the same thing was happening to the workers at Rocky Flats even though neither employees nor management realized it, and they were all victims.

Once the site was ready to go, the plants at Rocky Flats began work on part of the process of building high-powered bombs. The end result was not the finished product since this location merely assembled nuclear bomb cores, or pits, from plutonium, uranium and stainless steel components. Other work, some beginning and some finishing, was accomplished elsewhere at different weapons sites. The results were bombs that had much more potential than what were dropped on Hiroshima and Nagasaki.

As might be expected, there were many problems that came up relatively early and some that would appear much later. The first had to do with secrecy. The general public was not aware of what was happening as far as all the details of bomb construction. They didn't know where it was taking place and how many bombs were being produced. The people who knew of the mission were the AEC, Dow Chemical and those in government. However, they did not know of all the details and the danger. In 1995, the U. S.

Department of Energy labeled Rocky Flats the most dangerous weapons plant in the nation because of the health and safety risks.

The laborers doing the actual construction at Rocky Flats knew what they were building but not the extent of what the whole program across the country involved. The philosophy was everyone does his own little job so an individual worker wouldn't see the whole picture. As already mentioned, laborers came to work because of the high paying jobs but little did they know of what was really happening. Some may have speculated on just what they were a part of, but most didn't want to face the reality or else they simply accepted it as work. Some even rationalized that since the finished product was not done at Rocky Flats, they weren't actually creating bombs.

The secrecy factor meant that control was not a concern, nor could it be. Since knowledge was missing or not to be supplied, this meant many things could go wrong. For example, as the plants began production, certain goals were aimed for and met. As time progressed and the Cold War created more tension, people in power decided that production should be increased. This was indicated to the plants although not much else was done relative to how this increase in bomb production was to be accomplished. That is, the feeling was that employees reached their goals before and could do so even if higher numbers were desired. There was no consideration of the fact that maybe the workers stretched to do this and were stressed in the process.

Thus a few new employees were brought on to the scene, but don't forget that this meant training and other considerations. The AEC didn't see those problems and management at Rocky Flats reacted by only thinking of the new goal and not the resultant difficulties. The new output could now be reached but something would have to be sacrificed. This meant that certain safety procedures would be partially ignored and the health of the laborers

compromised. Fire safety, like nuclear waste, took a backseat to production.

Besides the security problem, another major concern had to do with the unknown. The entire process was a relatively new one and much information was lacking. This implied that reactions to problems may not have been correct or no one knew what to do under other new developments. Now add this dimension to the higher production goals and things became more complicated. Security had unknowns related to it but so did the technology working with plutonium.

Plutonium was a mysterious substance, but what was known about it was that it was pyrophoric, that is in some forms it could ignite spontaneously. It wouldn't exactly burn but it could set other material on fire and cause havoc. Rather it glowed like a charcoal briquette but it could burn so intensely that it could melt steel. Extinguishing it was no simple matter. Throwing water at it may have made it more volatile while a normal carbon dioxide fire extinguisher had little if any effect on bringing it under control. Plutonium was dropped into machine oil to put it out and this controlled it on many occasions. There were times when the process of extinguishing the blaze was not that simple. Fires sprang up from time to time, some more devastating than others. Two larger than usual and more consequential fires occurred on September 11, 1957 and Mother's Day, May 11, 1969. The September date – except for the year – would have significance almost half a century later. The latter fire broke all previous records for U.S. industrial accidents with a cleanup cost of \$70.7 million. Both these disasters would have great impact in the years to come.

These outstanding fires eventually led to the closing of the plant, but that was not until 1989. By that time many workers had died or were sick from the effects of being on the job at Rocky Flats. People working in the compound were at great risk due to the health hazards and many

succumbed to chemicals as well as beryllium and plutonium. The surrounding area outside the buildings was said to have acceptable levels of radiation. The only question in that respect is that since there were so many unknowns relative to the entire process, what exactly was a “safe level” of exposure? Needless to say the environment was contaminated but it could have been a great deal worse had those major fires gotten further out of hand.

But there was a still more dangerous problem insofar as byproducts of bomb building were concerned. First of all, what do you do with all the resulting chemicals and everything else that remain? The proposed solution was to ship it to a site in Arco, Idaho and this location received two hundred 55 gallon barrels a month from Rocky Flats during the first year of production, 1954. This amount was to increase throughout the years. Despite that change, with time there was a demand for more bombs, which could only mean more waste, which the Idaho facility couldn't handle. So what then happened to the excess plutonium-contaminated waste?

It turns out that since they couldn't ship it away, they kept it on the premises. Some was in different sized drums outside and some inside, awaiting a better place for permanent storage. Some of the containers were even buried, and eventually the barrels started to corrode. What was even more upsetting was that some of the dangerous waste was poured onto the ground on the premises. Over the years there were some 178 waste sites within the plant's boundaries.

Waste of all sorts was created but no good way to assure that wherever it was stored, it would be safe for generations to come. And yet that is the main problem with spent nuclear waste, whether from a munitions factory or a reactor for generating electric power. Even as early as 1947 the AEC advisory board concluded that radioactive waste presented “the gravest of problems.” Despite this assertion,

they claimed that everything was under control with no consequences!

So the result was a mess of health problems, radiation and contaminated waste, not to mention the bombs that were created. If you create a nuclear weapon and don't use it, you have wasted millions of dollars. If you wind up dropping it on someone, the result is a great deal of devastation and death to humanity as well as to the earth. Building bombs can never result in any good as Hanford, Rocky Flats and Oak Ridge point out. In these cases there are no winners.

Some facts about this bomb building process can be found in Mike Wright's book, *What They Didn't Teach You about the 60s*. These include,

“By 1960, the military budget was \$45.8 billion or 49.7 percent of the entire federal budget.”

That sounds like too much money for defense and the military. There is much more startling news as Wright relates,

“By 1962, the United States had more nuclear bombs than we could ever use: 1500 atomic bombs, more than enough to destroy every major city in the world.

This was the equivalent of ten tons of TNT for every man, woman and child on earth.”

At this time Rocky Flats is closed for production but the cleanup which began was to be completed in either late 2005 or early the next year. I recently heard that it was finished. At the start of the effort, there were speculations on how long it would take but these numbers were unknown, just as there were uncertainties when the process began in the 1950s. In 1995, a DOE study said that it would take 50 years and \$36.6 million to clean up. Energy secretary Federico Pena stated in 1997 that it would take nine years and \$7 billion. Besides these two guesses, there were various other estimates as to completion dates but the reality is that people just didn't know. When the cleanup is “complete,” there will still be doubt relative to any future repercussions.

Even if the media reports that the job is done, don't believe it.

Perhaps the only thing we can say without question is that Rocky Flats should never have been building bombs in the first place. Though the Colorado facility may have had the highest concentration of contamination of all the sites, we can't overlook the fact that it was only one of many scattered throughout the country. Consider yourself fortunate if your state wasn't involved. Nevertheless, you didn't have to travel far to see the danger of building the bomb. Our earth and its people were the ones who suffered.

I was going to summarize that this process of bomb building had two deleterious effects, but in reality the repercussions are many. I use the word *are* rather than *were* because of lasting effects that surround us today. From the narrative you can see that huge resources were wasted in the effort. The planet has a finite number of goods that can be used to create usable products. Creating an atom bomb simply wastes too many of these precious materials. The result is a huge, insane outcome with nothing gained – actually, quite a bit is lost – because of two thoughts: if you use the bomb, you will wreak havoc on the planet. This affects the land, air, water and the people. On the other hand, if that wonderful philosophy of deterrence is applied and the weapons sit in a warehouse, but are not deployed, you still have waste. Simultaneously, disposal becomes a problem at some time.

In bringing about an action using these weapons on a nation, you destroy civilizations – people and their treasures – while also bringing the lasting effects of radiation. The people of Nagasaki and Hiroshima can certainly attest to that. How they could ever forgive the aggressors and forget about what their relatives suffered defies credibility. Perhaps it has to do with the fact that most of the victims have left the earth and only their kin survive. They may not have been directly affected by the dropping of the atomic bombs.

The title of the chapter is the first line of our National Anthem – not one of my favorite songs for two reasons. I am not a professional singer but I have sung in the Liverpool Community Chorus, the Binghamton Symphony and Choral Society and numerous church choirs. I think others will agree that the Star Spangled Banner is too different to sing since it involves more octaves than I care to sing – out of range for most people. In addition, the words, “bombs bursting in air” can be found a bit later. This tends to make the song a war anthem. Maybe it’s time for a new song for our country. I’d prefer an anthem of peace.

## 2. Too much cancer

Besides the thousands of people who died from the atomic bombs that fell on Japan during World War II, the ones who survived the devastation did not escape the radiation emitted by those incendiaries. Many suffered with cancer, much like the employees at Rocky Flats and other facilities that built war munitions. This is one of the worse side effects of that venture with the atom.

On Friday, June 18, 2004, I attended a Relay for Life put on by the American Cancer Society. My sister Pat was one of the team captains and she spent a great deal of effort setting up, soliciting contributions, selling candles, luminaria and raffle tickets in order to raise funds for the cause. The event honored those who were cancer survivors as well as those who succumbed to the disease. During the ceremony, one speaker mentioned that she prayed for a day when we could just celebrate life and not have to worry about raising money for cancer research, insofar as a cure would have been discovered.

That was what all of those in attendance that night wished and prayed for, myself included. Nonetheless, I thought that maybe what we needed to do was find out why there is so much around, looking into what could be done so that it wouldn't be so prevalent in today's world. After all, you can find it on every continent and it does not discriminate based on sex, religion, race or class.

A few months ago, I finished reading a biography of Muddy Waters, the great blues singer from Mississippi. Many of his family and friends died from cancer. In some cases, once the diagnosis was made, there was not too much that could be done to save that person. Muddy also succumbed to the disease, although it looked for a time that he would conquer it. Today, some forms of cancer can be cured with surgery, radiation and chemotherapy. This is a better alternative, but still not without pain and suffering. It

would be better to eliminate the cause in the first place and not have to go through surgery of any kind.

Obviously bomb building creates radiation and this in turn causes cancer. In addition, as will be pointed out in various chapters to follow, industry does its part in an attempt to make our lives easier by some of the products it creates. You might think that this is one tradeoff that we need to make in order to advance as a society. Yet, if all of mankind succumb to cancer, there won't be a need to move forward in the world since there won't be individuals to do so.

There are almost as many types of cancer as there are parts of the body. In some cases, the cause of a particular type of cancer is known or suspected. For example, a report by the Harvard Center for Cancer Prevention stated that colon cancer is caused by tobacco use, diet, obesity and lack of exercise. It attributed two percent of U.S. colon cancer deaths to "environmental pollution." This number has been disputed by scientists as being too low. I tend to agree with them.

Colon cancer is rumored to be hereditary, that is, it occurs within families. Of course, this cause does not rule out the fact that it could be environmental. After all, if a family lives in a house in an area that is toxically polluted, being related may not be the main reason why these people all have colon cancer.

On the other hand, the causes of prostate cancer are supposedly unknown; however, there is virtually no prostate cancer in tropical areas. Since these countries have no major polluting industry just yet, this might lead us to believe that prostate cancer is indeed a result of the environment. Another statistic about this type of cancer finds more cases of it in African-American males. Since industry establishes itself in lower class neighborhoods peopled by men and women of color, this could almost verify that the cause of this cancer is indeed what is happening to the air, land and

water around us.

Men in China have very low rates of prostate cancer. However, when they move to the United States, they wind up with that dreaded affliction. It doesn't appear that the men would have made that much of a change of diet in their new homeland, once again attesting to the conclusion that prostate cancer is caused by environmental pollution.

Some of the other causes of cancer are smoking, eating unhealthy foods and living unwholesome lifestyles. As individuals, we might be to blame for not taking better care of ourselves. However, when a person doesn't drink or smoke, avoids red meat and eats plenty of fruit and vegetables and exercises regularly but still gets cancer, one can only believe that the cause is what industry has dumped into the oceans, lakes and rivers and onto the land.

The government and major corporations can be blamed for these fiascoes regarding bomb building and the effects of war. Some other disasters have occurred through the years, which I will get into. The blame once again is in the hands of these same entities. There may be other culprits, but it is too late to undo what has already occurred. We need to make sure that history doesn't repeat itself.



### 3. The assembly line

Most people think that Henry Ford was responsible for the assembly line method of production. He did utilize it in producing the automobile and I will spend an entire chapter on that machine. However, the meat packing plants of Chicago were really the first industry where a product came off the assembly line. Mr. Ford just took advantage of a technology that was already around.

Not long ago, PBS featured an excellent program about the city of Chicago. It was based on *Chicago: City of the Century*, the outstanding work by Donald Miller. If you didn't see the feature on public television, read the book. It's a great improvement over "reality TV." The time was the late 1800s, when Chicago had the reputation that New York City has today. Everyone wanted to go there and make his fortune. It was an exciting city, fraught with danger and thrills. Immigrants came from Europe to better themselves and for many, this was the place to be.

The flavor of the city can be obtained by reading Sinclair Lewis's piece of historical fiction, *The Jungle*. Exactly what was taking place in the meat packing plants is outlined in his work. It wasn't a pretty sight and certainly not very fragrant. The workers were treated harshly by management and so was the environment. When the great fire of 1871 hit the city, the Chicago River caught fire because of what was in it. Lake Michigan and the surrounding rivers were the dumping grounds for the waste of the packing plants. The fire devastated the city, but that didn't stop the inhabitants. After the smoke died down, people took it all in stride and said that they would rebuild the city. That's just what they did.

It may have been a great place to be, but Chicago of the nineteenth century was a filthy, smelly and polluted city. To get some idea of the stench, think back to some of your

visits to a meatpacking neighborhood in your city. That may be an experience you couldn't leave fast enough, but the City of the Century was much worse. There may not have been any radioactive materials there, but there certainly were some really nasty odors and substances.

The companies responsible for producing beef and pork, so that more people could have it on their table, were Armour and Swift. When it came to pork, these companies used as much of the animal as they could. There's a saying that the only part of the pig that they didn't use was the squeal. Nonetheless, there was still some waste. At the turn of the century, companies didn't consider what they would do with what was left over. They just tossed it into the lake or river.

The main concern of the meat packing plants was the bottom line, as the planet didn't merit any consideration. If a company had to be concerned about properly disposing of the useless remains of the cow or pig, that would cut into their profits. Of course, everyone was doing it and the EPA and Department of Health weren't around to police the polluters. Chicago had these problems but so did other cities across the country. Kansas City, Buffalo and Boston, to name a few, were all involved in the meat processing business. You might not think that all that disgusting waste had any effect on the people living in the city, but it did. After all, there was a great deal of sickness and the lifespan of men and women was much lower than that of people today. I should add that relatives of mine who put in time for meatpackers in Buffalo died at much too early an age. Certainly the medical profession did not have many of the advances that we have now, but conditions at that time had an effect on the lives of the inhabitants.

Eventually sewers, stricter laws and more overseeing of the plants came into play, but that took time. This policing of the meatpacking plants was a result of Sinclair Lewis' aforementioned novel. With the start of the twentieth

century, other companies such as the automobile manufacturers followed the lead of the meatpacking plants. They used the assembly line and most likely followed in the footsteps of the others as far as pollution was concerned. Only this industry was worse than its predecessor.

Today we still have the beef and pork packing plants as well as the numerous buildings that render chickens ready for public consumption. The late twentieth century was not free of the same problems that late nineteenth century cities endured. Obviously today's plants are better than those of yesteryear, but still more needs to be done. Today you read of pork companies that let their waste go into creeks, streams and holding "ponds," sometimes glamorously referred to as lagoons – I wonder if that is where the Brooke Shields / Christopher Adkins movie was filmed. These waste facilities don't do the environment or the citizens who live nearby any good. Water supplies become contaminated and it seems that corporations haven't learned anything from the past.

Companies pollute and could care less. The government tries to keep an eye on these businesses but they don't have enough manpower, thanks to cutbacks. Thus they can't check on many of the guilty parties and the earth suffers the consequences. As a result, ordinary citizens are burdened with forming grassroots organizations to combat corporate America. It really shouldn't be their job. On the other hand, if you happen to work for one of these plants and make a stink about the smell and what else is going on, most likely you will soon have fewer friends and need to look for another job. It might even get worse than that.

The battle to protect our land, air and water supply is an endless task. The situation may have improved over the last century, but there are still problems, as corporations will do the least amount to protect the planet. It's unfortunate that the government doesn't make these polluters clean up the mess they produced and pay for all the damage that they have done to the earth and those who inhabit it.



#### 4. Keep on truckin'

Not long ago a friend of mine mentioned that one of the worse inventions of all time was the motor vehicle. Even though the book is about a wonder horse, you can get some insight into the first automobiles by reading *Seabiscuit: An American Legend* by Laura Hillenbrand. Certainly the automobile has worked wonders for all of us, but somehow things may have gotten out of hand. Besides helping to cause the greenhouse effect, cars have been responsible for divorce, war and environmental pillaging. I will get into more detail on some of these effects in upcoming chapters. For now, let's look at what Ford, GM and Chrysler have contributed.

The automobile giants have been reaping huge profits for years. They failed the American public when they could have done much more for the environment and its inhabitants. Just consider gasoline mileage over the last thirty years. If some cars could get twenty-five or thirty miles to the gallon a quarter century ago, today you would expect advances in technology to lead to improvements that would enable vehicles to get double those numbers or even better. Look around on the highways today and you will see that the average mileage is less than twenty miles to the gallon. It doesn't look like there have been any improvements.

Actually there is one, and that is in the wallets of the manufacturers of cars and trucks as well as the oil companies. They have more profits at the expense of the buying public than at any time in the past. They wanted our support and got it but acted irresponsibly towards the environment. Let us start with equipment to control pollution. It appears that advances over the years have been introduced to be friendlier to the earth. This was probably not initiated by the car companies, but even so Ford, GM and

Chrysler made out all right in the process of having cleaner air. They added the necessary devices but charged for it.

For a time some cars were getting better mileage and even today some newer models of some lines do improve from year to year. The smaller car was the answer to improved mileage. I bought a used 1989 Honda Civic CRX in 1991 and when I had finished driving it seven years later, the odometer read over 237,000 miles. I myself had accounted for 200,000 of those miles and by my calculation, that vehicle, for highway and city driving, attained almost fifty miles to the gallon.

I should emphasize that this car was manufactured almost twenty years ago and it had a four-cylinder gasoline engine. That was one of the reasons for the great mileage. There are some cars today that get better mileage than that, but very few – and that's only because the driver shuts off the engine going down inclines – when it should be the norm. Actually if you look out your window as you drive on the highway you will not see that many cars. Instead the majority of vehicles will be trucks, vans and SUVs. This explains why there have not been improvements in gas mileage over the years. Those trucks and SUVs need gasoline to perform, and lots of it. The vans do better when it comes to fuel economy. There seems to be good news around the corner as soon gas in the United States will be four dollars a gallon or more, resulting in less of these monsters on the road.

You might ask why there is such a preponderance of these types of gas-sucking vehicles rather than conventional cars on the road. Obviously the van has more room to accommodate bigger families, although I see smaller families today in them than in the past. Actually over the years, since the size of the family has decreased, there should be less need for these vans from that perspective. People who travel on vacation probably want more room so that's why they buy them.

The trucks and SUVs, however, are another story. In general, neither of these provides that much more room than the average car. So then why are there so many of these types of transportation being driven? The automobile companies can answer that question. There are two reasons. The first has to do with profit made from a vehicle. If you build an economical car, you can't sell it for too high a price and thus your profit will be small indeed. This was happening for some time but then someone came up with the idea of how more profit could be made. The answer was to make trucks bigger and charge more for them. Some vans were not that pricey but you could make them more so by adding extra features, such as a Jacuzzi in the back.

When it came on the market, the SUV was similar to both the truck and van. It was almost a cross between the two. It was bigger, just like the truck and had more room, though not as much as the van. In many cases, it had a bigger price tag, which would help generate huge corporate profits. Of course, creating the vehicle was one thing but selling it was quite another. However, since the public was hoodwinked into buying trucks, it shouldn't be too hard to sell the SUV.

The way this was accomplished was somewhat similar to the approach for marketing trucks. SUVs were promoted as being rugged and capable of climbing mountains and able to traverse snow, no matter how deep. Another selling point was the fact that they were safer because of their size. That is what led to success in selling trucks and certainly this would work again. The SUV was successful for those very reasons. The precursor of today's behemoth was around some time ago when people drove Jeeps. Certainly this forerunner was a bit smaller than that seen on the road today. Today's SUV even comes in the form of civilian Humvees and Hummers.

We can witness the result of this creation as we stroll down the sidewalk for some daily exercise. The automobile

manufacturers got richer and the consumer bought right into the program. But there were problems. For one thing, their product sucked down the gas and was not at all friendly to the planet. Moreover, their whole campaign to sell this contraption was a big lie. The SUV was supposed to be safer than an ordinary car but in fact it wasn't anything close to that.

I drove an SUV in the late 1970s, although not of my own choice. For some reason I drove a friend's Jeep and I recall that road handling was horrible. It was a real challenge to drive and I didn't feel too comfortable behind the wheel. That one characteristic is true even in the SUV that we see on the road today. Because of its design, it has safety problems. Stability in a vehicle is dependent on its height and width. The wider it is and the lower it is to the ground, the safer will it be. SUVs have a narrow base and their height adds to this instability.

Perhaps the vehicle should be called a USV, which stands for UnSafe or UnStable Vehicle because of this design flaw. Even at a very low speed of twenty miles per hour, rollovers have occurred. This is due to the high center of gravity of the SUV. And it doesn't matter what company creates that vehicle, whether Ford, GM, Chrysler, Honda or anyone else for that matter. The sad thing is that this safety factor has been known about for years and still little has been done about it.

In the 1980s Ford came out with their SUV, the Bronco II. Like just about any SUV that has been produced since, this vehicle was sporty, with plenty of power, luxury and it was a favorite with families. Unfortunately some people riding in it were not protected when rollovers occurred. Death and injuries brought about numerous lawsuits in the 1980s and Ford even admitted danger but still kept producing it. Engineers with the company advocated widening it to make it safer, but to do this would delay production and so nothing was done.

The 1970s saw the energy crisis and the Carter administration along with the Congress passed laws for better fuel efficiency. This should have kept the SUV from being produced but there was a loophole. One class of vehicle, namely trucks, had relaxed standards for mileage. Thus the sport utility vehicle was created in that category and the manufacturers did not have to be concerned with good mileage. A few years later Ronald Reagan was in office and with his tenure, regulations were done away with regarding fuel efficiency. Not only were the laws that were in place rescinded, but any new efforts at fuel economy were not considered. The SUV had clear sailing and the profits could keep rolling in, while the vehicle itself was rolling over.

This extra, undesired feature was a huge problem but the manufacturer never worried about it. The Ford Motor Company argued that the cause of accidents was driver error but nonetheless settled the lawsuits quietly. There were no design changes since the profit levels were so high. Thus the lives of human beings were not a concern for the company. It would be cheaper to pay the plaintiffs rather than to recall or redesign the SUV, so the latter was not done. The results were lawsuits, settlements and secrecy.

The National Highway Traffic and Safety Administration (NHTSA) saw the problem and worked to remedy it but there were difficulties. At one time a head of the NHTSA went against the advice of her entire staff and felt that safety was not a problem. Hence technical people in the know who had advocated safety concerns were ignored. There should have been a standard for safety but the government decided against it. The Bronco II should have been recalled for safety reasons but wasn't and this created a precedent for other car manufactures, who could now follow suit and they came out with their own SUVs.

The Explorer replaced the Bronco II and came on the scene in March 1990. It ignited the SUV market but the

rollovers were not eliminated. Widening the wheel track would have been a large improvement towards safety but it was not done. In order to do this, you would have to scrap the original design and start over and the company refused. There was a need for return on investment. The profits flowed in along with more rollovers and lawsuits.

Senator Richard Bryan of Nevada proposed a bill to raise mileage requirements forty percent by the year 2001. This legislation would include SUVs. Motor City quickly saw that if this became law it would deal a severe blow to the auto industry. They could not let this happen so they lobbied against it. They formed the Coalition for Vehicle Choice and argued that fuel economy was important but not at the expense of safety. NHTSA even proceeded to demonstrate via video what would happen when a small fuel-efficient car ran up against a huge SUV. Detroit went to political war to protect the cash cow gas-guzzler. The efforts worked, as the bill was defeated.

What NHTSA didn't say in the demonstration was that if there were no SUVs, this exhibition of inequitable forces colliding wouldn't have occurred. They also failed to accept the fact that safety and economy could exist simultaneously. Finally, if they were so concerned about safety and size, why did they not show what would happen when an SUV met a steamroller head-on or a cement truck or a semi tractor-trailer?

Statistics show that while they were lobbying for safety, more people were dying on the highway because of the SUVs. They weren't being protected while they were inside those behemoths. It is ironic that the result of the special efforts promoting SUVs and their safety for the occupants was less safety on the road. Anyone knows that the best way to make a vehicle safer is to make an adjustment to the nut behind the wheel. Even if that were done relative to the SUV, it still wouldn't make a difference due to the inherent hazards in the design.

Bigger is better won out. We cannot rule out the support that the industry had from the public. After all, they were buying this product. If they hadn't, production of the SUV would not have continued. People are inveigled into getting into bigger armored vehicles in order to engage each other on the highway. If you had a choice of flying in a safe small plane or a completely unsafe aircraft ten times as large, which would you choose?

Some months ago, I saw a feature on a national news show about the safety of SUVs. It showed one of these vehicles losing control on an icy highway, spiraling along the side of the road. The commentator concluded by saying that all the passengers inside walked away with no injuries. With what I saw, there is no way that I would believe that statement. Maybe they meant there was no blood resulting from the mishap. While living in South Salem, New York at the end of the twentieth century, I was on my way home from work when I witnessed an SUV that went onto the side of the road – I'm not sure exactly why – and then proceeded to roll over, even though it wasn't named Rover.

These rollovers would continue even as production did. In the United States, one of four vehicles is an SUV. Cars today in this country have the lowest gas mileage in twenty years. If you think the gas companies are getting rich, don't forget the car manufacturers. One factory making the Ford Expedition and Lincoln Navigator was making more profits than any other factory in any other industry in the world. At the same time this same location had more profit than all but several dozen companies in the world.

One day Ford encountered Firestone and things changed. Each blamed the other as the Ford Explorer with Firestone tires did the spin thing and now the two companies blamed each other for the loss of hundreds of lives. This battle took over the headlines of the papers for an entire year. Despite the fact that the tires were only a small part of the problem, Firestone became the scapegoat as Ford sent in

their lobbyists and high-priced lawyers and passed the blame onto the tire company. The problem all along was, and still is that SUVs are misbehaving even with good tires. Even with this setback for Ford and the loss of market share, the Explorer remains the best selling SUV in the world.

Lawsuits were occurring for years but Firestone versus Ford may have brought some safety concerns to light as the decade of the 1990s witnessed some 12,000 deaths caused by rollovers. The beginning of the decade witnessed approximately 700 fatalities, which increased to 2000 by the late 1990s. Eventually the Explorer was widened by two inches even though the company said this was done for passenger comfort and not safety. Today many SUVs are being designed lower and wider, just as was suggested fifteen years ago. Deaths climb ten percent each year from SUVs and there was a prediction of an estimated 70,000 rollovers and 2,000 projected deaths for the year 2002. I don't have statistics for that year so I can't say if the projection was correct.

The April 2002 issue of Kiplinger's Personal Finance magazine mentioned that Japanese automakers would quadruple production of SUVs, light trucks and hybrid vehicles the following year. This would be done to offer competition to the American car manufacturers. All we need are more of these monsters on the highway. I hope they developed something safer than what we saw in SUVs recently.

It is not true that the name of this Japanese SUV will be the "Rollover." Nor is it true that an American automobile manufacturer has come out with a combination SUV and truck, which they plan to call the SUCK.

## 5. Car troubles

As I alluded to in the last chapter, there are a few other effects that cars, trucks, vans and SUVs have brought into play. The first is road rage, which seems to be everywhere you travel on the highway. None of us can escape it. It wouldn't be a problem if people were more considerate of others and realized that you can't drive thirty miles in thirty minutes or less, except under ideal circumstances. No matter where you go and when you drive, you must realize that there will be impediments on the road to slow you down. Weather can be one factor as well as accidents and construction. You may just as well get used to all these possibilities, since no highway that I am aware of has ideal conditions, except the virtual highway.

Contrary to the view of many, there is no such thing as the right to have a driver's license. If you are fortunate enough to possess one, you need to realize that you have responsibilities once you turn over the ignition on your car. You need to obey the rules of the road. If you don't, your privileges can be revoked. Speeding down the highway, reckless driving, weaving from one lane to another and going through stop signs and red lights are all good ways to become a full-time rider of the bus.

Any of this undesirable behavior behind the wheel is not good for the driver, others on the road and the environment. Driving over the speed limit is not safe, puts others lives in jeopardy and wastes gas, one of the earth's resources. The same applies to weaving between lanes and reckless use of the car. You may save gas by doing so, but running a red light may get you into an accident and that will affect the driver, others and the environment. Totaling a car means one more donation to the junkyard, which won't help our planet in the least.

Over the years, cars and trucks have done a great deal to disrupt the family. With the success of the automobile

came the movement to the suburbs. People may not have been able to live in the city because of the high price of real estate, so they settled on the outskirts of town. This was true even in cities with mass transit. The result was that larger houses could be purchased and individuals could at the same time still retain their jobs in the city. That may sound ideal but it created the commuter and the resulting longer work day, assuming you include driving or riding the train to the office.

These scenarios meant that families were apart longer during the day and this, in turn, led to the break-up of many marriages. If that wasn't enough, remember that commuting requires energy, so the earth took a hit as well. Now factor in driving to the store and other trips around town and you can see that the gas gage was on empty too often. I'm sure you've heard of all those soccer moms or dads hauling their children to practice.

There is one obvious problem that we can't avoid: commuting. The result is too much traffic on the highway, and the "rush hour." Why do they call it that as no one is getting anywhere with all the gridlock? That expression is a gross misnomer and should be removed from the language. People are frustrated with not getting anywhere and sure enough, it won't be long before a case of road rage erupts. I haven't even mentioned the stress and health problems that result from these tie-ups. There has to be a better way.

Mass transit can solve some of the problem although the workdays will be long for those involved. When I started my first contract as a computer consultant in Manhattan, I had a fifty-mile commute from my house to a bank across the street from the World Trade Center. I drove my car, rode the train and subway and walked a bit. The time of my trip was about two hours each way. Fortunately I only went through that gig for six months. However, there are people in cities such as New York, Washington, D.C. and Chicago that have even longer commutes and they have been doing it for

years. Being able to work at home a few days a week would improve matters immensely.

Commuting by train or bus is a great idea, but another solution is to build self-contained communities with most amenities, including the office. That would certainly make for shorter weekdays for employees. The environment would be grateful as well. Productivity would be up, health problems would diminish and the family would stay together longer. I don't think many people will argue with that concept. There are some of these types of communities across the land, but we need more.

Car problems would be virtually eliminated. If you don't have to drive, the car will last longer. If you are close to your place of employment, you may even be able to walk there. That will mean healthier workers and fewer sick days. This means that commuting costs will go down and with them, there'll be more cash for other things. This type of living isn't free of problems, but it's something that needs to be considered, and it's a great deal better than what we have now.

Over the years automakers have done some good things. It wasn't that long ago that a car was ready for the junk heap after it had 60,000 miles on its odometer. Today vehicles easily can reach 150,000 miles without having the engine rebuilt. My 1994 Saturn had over 180,000 miles on it when I traded it in. The car before that one was a Honda Civic, which I mentioned earlier. I donated it to charity with just under a quarter million miles on the odometer. Longevity is a good thing and it helps keep cars out of the junkyard.

The car companies have made cars safer and less in need of repairs. Unfortunately some people see commercials on television where an SUV climbs a mountain and they think that their vehicle can drive on ice at the speed limit. Well, you may be able to do that – once. Some of the features such as DVD and video players I question. It seems

like a car is the second home for some people. Granted, I slept in my Chevy when I was attending college. However, I had little choice. It was before class and I needed rest. Thank God, those days are behind me.

It's unfortunate that car companies haven't produced cars with better mileage. That would have helped the environment and probably even avoided what occurred on September 11, 2001. Coming up with alternatives to gasoline is currently in process. There are cars that run on electricity. Unfortunately you need a long extension cord. Some cars run on fuels other than gasoline. Progress is being made, but slowly.

Automobiles are such a status symbol that no one wants to give them up. If someone loses his license because of speeding, that individual may still drive illegally and hope not to get stopped. Age catches up with all of us and there comes a time when reflexes are slower and it's time to surrender the license. This situation can be traumatic for some and thus it creates many problems. Living in a community with all the amenities or in a city with a good mass transit system does help alleviate the inability to get around by driving. It can also save the earth and its resources.

## 6. Global warming

Many people argue that global warming is a myth. Some of those people who feel that way are scientists. I wonder what is brewing in their lab. Fortunately, there is a majority of thinkers who don't practice junk science and who are well aware of the threat we are facing to planet earth. There are too many signs pointing to the fact that the greenhouse effect is here and something needs to be done about it. Unfortunately, if we delay too long, it may be too late.

A good first step is ratification of the Kyoto Protocol to reduce greenhouse gas emissions. The United States opposes this action on the basis that it would hurt the economy of the country. This reminds me of a skit that the Smothers Brothers did on their show many years ago. Tommy pointed out that you could tell who is in control in government by the amount of clothes people are wearing. Those wearing almost no clothes are the "less-ons." At this point, Dick asked, "So who's running the country?" Tom's reply was, "The morons!" Some things never change.

On the Kyoto accord in an interview with the Washington Post on April 24, 2001, the chief executive said, "First, we would not accept a treaty that would not have been ratified, nor a treaty that I thought made sense for the country." He said it, I'm only reporting it.

If the reason for not ratifying this treaty is not a poor excuse, I don't know what is. If the environment gets destroyed, the economy of the country is irrelevant. It's time to ratify the Protocol. With this effort, new jobs, many related to the environment, can be created and the economy can soar. It can only improve on the way it is now.

Consider the rain forest and the macaw, a creature that is so beautiful and colorful that individuals want to capture it and sell it for huge profit. In the process, as is to be expected, many of the birds die. They die when they can't

adjust to living inside someone's home, away from their natural habitat. In the forest they find nourishment, but what they are looking for isn't all that abundant. They seek out a special kind of nut, enclosed by a rock-hard shell. Even with a hammer, humans will find it extremely difficult to open. The macaw uses its strong beak and finds the task relatively easy. In the process of opening the nut, some of the fruit falls to the ground or water below. This excess is enjoyed by other creatures nearby, who in turn may become prey for larger animals. All these small events keep the system flowing and in harmony.

Computer systems are very similar to ecosystems. Each consists of small but very significant parts, any of which can cause great distress if missing or corrupted. A computer system is made up of programs and files. If one program incorrectly creates a file that is needed by other parts of the system, the system has a good chance of crashing. The same applies to our ecosystem. If too many macaws are pilfered, not enough nuts will be cracked open and certain creatures may die because of a lack of food. If trees are logged and they contain the precious nut being discussed, once again the ecosystem will be in danger. The result could be the same if a road were constructed through the rain forest. There is a gentle balance and it won't take much to upset it.

For those who still question whether global warming is a problem, let me offer some facts. In Funafuti, Tuvalu in the remote Pacific, the rising sea is destroying the shores; puddles of water have become lakes. In the Marshall Islands, about 1,250 miles north, the sea is uprooting coconut trees. In both cases, global warming is causing the ocean to rise.

The Intergovernmental Panel on Climate Change (IPCC) has predicted that temperatures could rise over ten degrees by the year 2100. Even with some effort to reduce emissions, whether from cars or smokestacks, temperatures could still rise by 2.5 degrees. Over the twentieth century,

temperatures rose one degree, with the majority of the increase occurring during the last decade of the century.

With the continued rising of the oceans, islands in the Pacific will be swept away. Some already have. Islanders already are reporting erosion of their shorelines. This affects the people, animals and plant life, thus messing with the balance of nature. In late summer not long ago, the Arctic ice was believed to be only sixty per cent as thick as it was a few decades before. Glaciers are melting away. Montana's Glacial National Park at one time had 150 glaciers. Today it has one sixth of that number. By the time you read this, it probably will be even less.

In many parts of the world, spring is arriving earlier. The warming trends dry out the land, without precipitation, causing drought and other problems to animals and vegetation. Crops are destroyed for lack of rain. The drought in southern Africa over the last two decades is most likely attributed to climate change.

Crazy weather is all around us. We witness tornadoes, wildfires, floods and hurricanes, the latter of which seem to be arriving earlier each year and stretching the season. A few winters ago, Buffalo was hit with seven feet of snow over the course of two days. As usual, we the inhabitants survived, but that delivery of the white stuff doesn't sound like a normal occurrence to me. In October 2006, less than a month after the start of autumn, Western New York was blessed with twenty-four inches of snow. You might think that this was a beautiful site, but the leaves had not yet departed the trees and so the result was huge devastation. Trees that didn't fall to the ground had so much damage that eventually they were completely removed. Some of these would have survived, except the individuals doing the work got paid by the number of trees they decimated, so they had little concern. It was a sad time for our area.

Even if you still are not convinced of global warming, you should at least be able to agree that action should be taken to prevent a future occurrence, whenever that may come. Take precautions now, before it's too late. It's always better to make the effort and not take any chances. Tomorrow will be too late to do anything.

## 7. Wealth and waste

If you possess great wealth, you may decide to build a home with an outrageous amount of living space, say 10,000 square feet. It doesn't take an Einstein to realize that this building will consume enormous amounts of energy, unless it is powered by the sun and wind. Even if the house takes advantage of those two resources, the earth will be stretched for resources, since materials are needed to construct the edifice, and furniture and appliances are required to fill it. After all, what good is a home with empty rooms? The echo will drive you nuts.

The house might have vinyl siding and a huge deck made of pressure treated lumber. The driveway could stretch for a quarter mile, leading into a four-car garage. Inside the garage will be a high performance car that costs well over \$100,000 as well as a fully loaded truck, an SUV and a Hummer. That, by the way, rhymes with dumber. High performance cars are notorious for pollution of the earth and those vehicles will add to the earth's woes.

The surrounding landscape will feature trees, shrubs and an abundance of grass, which will be highly maintained by a local company. There won't be a single dandelion in the lawn, so the servants can't produce any dandelion wine for the owners. If one of those yellow-blossomed plants should just happen to appear, it will be removed with some toxic weed remover before the tenants even see it. A lawn company will appear every few months to guarantee that this is the greenest grass for miles around.

The grounds will be immaculate. However, the chemical company that sprays the lawn to keep it that way will poison the land, air and people close-by. You hear so often about these spraying endeavors where you are warned to stay away from the grass for a couple days. What makes you think that it will be safe for pets and humans after forty-

eight hours? Remember that the poison has to wind up somewhere.

Until recently, I felt that you should have a maintenance-free home so that you could spend some time other than laboring on your abode. If you worked at the office all week and then spent the weekend laboring around the yard, you'd have little time for relaxation. My first house had a pressure-treated lumber deck, as did the other homes I owned. It didn't make sense to have a deck built from cedar that would need replacing in a few years, thanks to the effects of the weather. Why paint your house every seven years when you can have aluminum or vinyl siding that never needs work?

Recently we found out about arsenic in the school playgrounds built with pressure-treated lumber. Unfortunately kids were playing on swings and slides that either contained the arsenic or were close to it. Toxins and poisons in the environment are a danger to all humans, but more so to young children. Maybe the people who built the kids' area should have used safer materials.

Getting back to the 10,000 square foot castle, the siding is made of vinyl or PVC, another maintenance-free product. Unfortunately, it is dangerously unsafe, and I will spend more time on that awful substance in a chapter on vinyl and chemicals. Perhaps the choice for the exterior wasn't such a good one after all.

The interior of the house is loaded with appliances and all types of electronics goods. There's a fire alarm system as well as a surveillance system for protection from intruders. Any new innovation that has appeared recently can be found inside this mansion. There's an air purification system as well as a central cleaning feature. There's a comfort system where the temperature of each part of each room is controlled by a computer.

One room is a home theatre, complete with a plasma screen, DVD player and an eight-speaker surround sound

system. Another room has a network of PCs, with every feature that anyone could imagine. Some of these have yet to be utilized and some probably never will be needed. All of these “conveniences” are here because of the resources of the earth. The energy to run this house is more than that spent by families on one city block or a Third World country.

Technology has created all these gadgets but somehow forgot one little detail. When a product’s life is done or a person no longer needs it, what will happen to it? Most likely, it will be tossed into the trash, which eventually winds up in the landfill. These electronics goods have so many chemicals in them that a once contaminated dump will only be more dangerous to society. The land, air and nearby creeks and rivers will only be rendered more useless to the people, near and far. Rachel Carson warned us about these problems many years ago in her book, *Silent Spring*, but it seems too many people were preoccupied with life’s pleasures, so they didn’t have time to read it.

As you can imagine, those with the greatest amounts of wealth tend to abuse the earth’s resources the most. After all, they have the cash to do so and could care less about the environment. This is not true for all rich individuals, but the top ten percent of the wealthiest people waste over sixty percent of what’s available. Those numbers are indeed alarming. However, middle class and poor people are not without blame. Just take a ride in the country on any weekend.

During the Memorial Day weekend a few years ago I visited my cousin and her husband. We had a nice visit and on Saturday spent a few hours hosting a yard sale. I basically stood around and did very little. My hosts did much preparing in the days before I arrived at their house and the sale began promptly at seven a.m. on Saturday morning. Getting up so early is a drag, but the good news is that most of what was meant to be sold was gone, and the event was

over before noon. I don't particularly care for garage sales, but at least I could tolerate this one.

About a month after that my parents decided to sell off some of the material possessions that they could no longer use. My sister and I "volunteered" to man the front yard for different stretches of time. Unfortunately this was to go on for two days, Friday and Saturday, and it was by no means set to end each day before high noon. When we finally closed up and moved the goods inside on the second day, I was glad that it was over. As you can tell, I would almost rather have been at the dentist's office.

The two-day extravaganza wasn't very successful as the money brought in was minimal and what's more annoying was we still had to transport the unsold stuff back to the cellar or garage. It would probably have been more beneficial to call some charitable organization that picks up these kinds of items and let them load their truck. For one thing, you wouldn't have to mark each item or set out prices somewhere and you wouldn't have to waste away both a Friday and Saturday. Shortly after my father died, my mom decided on another flea market fiasco, but this one went on for more than just a couple of days.

Around this same time, I signed up for a table at the St. Gabriel's Church garage sale. My intent was to try to sell the books that I had written, rather than try to move some of my other possessions. I wasn't very successful as people who come to these events probably don't have that much time to read as they are too busy heading off to yard sales. The amount of stuff that I saw that day was incredible. I didn't think you could crowd that much junk into one gymnasium.

And yet, this type of sales takes place during the week as well as on the weekend at numerous houses in every town and city in the country. There are even areas where giant flea markets occur every Saturday and Sunday. These sales are not new but have been going on for years. Every

season of the year has them and this might indicate that we buy too much stuff.

The goods – that could be the wrong word – that don't sell have a high likelihood of ending up in the trash. Not very far from the city of New York on Staten Island sits the Freshkills Landfill. It is so massive that it can be seen from the moon. You probably thought no one lived there. The landfill is currently closed, but at one time 8,500 tons of garbage would arrive there from the Big Apple daily. I am not sure what the city of New York is doing with all their garbage today. I assume they found a place for it.

We all know about planned obsolescence. We buy a product and it lasts for a certain length of time before it has to be replaced. This idea is great for business, as consumers need to keep spending to replace the goods. Production keeps right on going. The concept is not that great for the planet. Eventually resources for these things will run dry. At the same time, the landfills wind up receiving the refuse. I have already talked about some of those dangers, depending on the product and the means of disposal.

Some products last longer than others. If you consider the personal computer, you might agree that both the software and hardware do last quite a while, even if they don't work the way you'd like. The way they are marketed, produced and sold, we are led to believe that upgrades are frequently needed. Many people have the impression that when they buy a PC, it will be obsolete as soon as they leave the store. This is thanks to the efforts of marketing and because of new *advancements* and *improved* versions of the product. The real story is that the company rushed their newest creation to the public so as to beat the competition without having removed the bugs. Oh well, the consumer will tell them what is wrong anyway. Now just add a few outrageous charges for a service contract and the company can actually make money solving those problems.

I have already mentioned the danger of filling dumping grounds with used electronic products. But what about the software? You might think that it shouldn't be a problem, no matter how many different versions come out. That only means you forgot that the product came on a now obsolete CD and it probably had more wrappings than a homeless person in Minnesota in winter. All this packaging – for the CD – will probably be thrown into the landfill, but what about the disk inside? It goes along with the wrapper to its final destination, the junk heap. Since it's plastic, why not try to recycle it?

Another way to load up the landfill is to create a product that is dumped because it is cheaper to replace than to repair. This is especially true of the environment's nemesis, electronic products. Moreover, many of these toys and gadgets rely on power from batteries. When these cells have reached the end of their life, they are tossed into the trash, which eventually winds up in the landfill. The makeup of these batteries indicates that the dump is now even more contaminated.

One other reason why we have loaded landfills has to do with the fact that we are a disposable society. We have the camera that allows us to take twenty or twenty-four pictures and then toss. That's what the photo developer does after developing our film. The poisonous chemicals used in photo developing aren't good for the planet, either.

We also have disposable razors and not long ago I heard that Blockbuster was coming out with a disposable DVD. With this possibility, you can get the movie, watch it a few times and not have to worry about sending it back. Just toss it into the trash. I'm not sure how this venture ended, but it seems that Blockbuster really didn't consider the earth when they originated this concept. At least they didn't think of other ways to accomplish their mission. In my opinion, Blockbuster's idea was not a very good one.

## 8. Power to burn

I may have alluded to the fact that the bigger the house, the more energy is required to sustain it. But small or large, each house needs electricity, gas, oil or some resource for the comfort of its occupants. It wasn't that many years ago that food was kept cold by blocks of ice in an icebox in a cool room, which may not have been connected to the house. A stove provided warmth for the home as well as meals. A furnace burned coal in the basement for heat.

Today, advances in technology have given us a lot more conveniences, perhaps too many. Just consider this situation. The temperature outside is about twenty-eight degrees, a few degrees below freezing. In a warmed house it's a toasty seventy degrees – certainly not my home, except in the summer. In the kitchen, a name brand refrigerator keeps everything at the right temperature, except for the butter. But that problem is remedied with a butter warmer. This certainly carries things a bit too far. I prefer dipping my bread in olive oil and fresh basil, rather than butter.

Getting back to yesteryear, coal kept homes warm, but it was dirty and polluting. Mining this resource didn't help the environment and many of the workers died on the job. The ones who survived may have wound up with black lung disease or other respiratory illnesses. It was quite a price to pay to have heat in a dwelling. Soon homes were heating with oil and gas, but each had some impact on the earth, as well as dangers to the workers.

These problems were apparently solved with the introduction of nuclear power, a form of energy that was cleaner and cheaper, or so most people were led to believe. It was a result of the energy crisis of the 1970s that nuclear power turned out to be somewhat of a solution. But despite the fact that advances were made with nuclear power plants, it was not without problems. After over a half century, there is still no place to store the spent nuclear fuel. I have already

mentioned some of the other difficulties that were encountered at Rocky Flats.

This was driven home on Wednesday, March 28, 1979 when a crisis came about at the Metropolitan Edison run Three Mile Island Unit 2 power facility, ten miles from Harrisburg, Pennsylvania. This situation turned into the worst nuclear event in the history of the United States. It began at 4 a.m. when a valve failed to close and the core began to overheat. One operator responded by shutting off the emergency water system that would have cooled the core. This human intervention caused great difficulties over the next five days, and had the system not been shut down, there would have been no crisis.

The immediate result was that the console in the control room went crazy and chaos resulted. The computers were generating all kinds of information, but by the time people got the printout and looked at the data, hours had been lost. Soon the core registered a temperature of 4300 degrees. At 5200 degrees there would have been a meltdown or China syndrome. If that happened, the core would have turned into a molten hot mass, huge amounts of radioactive steam would have spouted out into the area and disaster spread over Harrisburg and for miles around.

The control room was soon flooded with people, not sure of what should be done. Some operators even felt that the core was safe. It wasn't long before a message came out that there was radiation in the room. Ten-thousand rems per hour of radiation were detected in the containment dome. At that rate, only minutes of exposure would be fatal.

While confusion reigned inside the facility, news of the problem was not known to the outside world until 7:50 a.m. when Governor Dick Thornburgh got word. Shortly thereafter reporter Mike Pintek suspected that all was not right when he saw various fire department vehicles rushing to the plant. He also noticed that no steam was being emitted from the tower, which was quite unusual. He called the

facility but because of all the chaos, the operator put him right through to the control room. He was almost completely ignored but did manage to hear someone mention, "We have a problem." They weren't in Houston, but now the word was out.

Before long phone calls were made and soon Metropolitan Edison calmed the people by saying that despite the accident, no radiation was detected off plant grounds. People's heads may have been moving about in a circle, but at the same time it appeared as though the authorities were employing a bit of spin themselves. Luckily, not everyone bought in to the message. Thornburgh, lieutenant governor William Scranton III and other government officials soon realized that the problem was more serious than they were led to believe by the power company. Robert Reid, the mayor of Middletown, upriver from Three Mile Island, heard statements that just weren't true. He was angry, upset, and indignant just like Thornburgh and Scranton, and would remain so for some time. They had been lied to.

Throughout the days of the crisis, government officials and other citizens of the area would realize that they shouldn't believe all that comes out of the mouths of company officials, members of the federal Nuclear Regulatory Commission (NRC) and some of the press. A foreign correspondent had written that Dick Thornburgh's pregnant wife had been evacuated from the area. First, she never left and second, she wasn't with child.

That afternoon amidst all the consternation, the national press assembled in the area. Met Ed offered a spokesman to pacify the people, but he had no public relations skills. He told the people that there was no concern, but his words were condescending. He only brought out more hostility from the audience.

Meanwhile, in Bethesda, Maryland, the NRC set up an emergency center for the crisis. They were to monitor

Unit 2 and eventually send some representatives to the plant. When the inspectors arrived, they noticed that all the people in the control room were wearing respirators. It was an intense situation. It got worse as far as communication was concerned. There were two phone lines to the outside world, and as one might expect, they became as reliable as trying to email someone today. Contact became almost impossible.

Sometime that afternoon the message came out to “get water moving through the core.” When the pumps were restarted by the operator, temperature and pressure dropped and stabilized. Sixteen hours after the debacle began, it seemed like everything was back to normal. Nonetheless, government officials, power plant personnel and NRC honchos continued monitoring events. Things weren’t all rosy just yet.

On Thursday morning Harold Denton, an official from the NRC arrived on the scene. He had scientific knowledge, wasn’t arrogant and people sensed that he was the right person to have present under these circumstances. In general, the NRC was thought to be in cahoots with the nuclear power plants. There had been a great deal of overconfidence on the part of officials that this type of power was completely safe. There were so many backups of systems that an event like that which had occurred was close to impossible. As I pointed out, if the operator had not made just one shutdown, the system would probably have taken care of itself with no repercussions. Of course, you can never rule out Murphy’s Law. In addition, the valve that had problems had failed on eleven occasions previously at other installations. Unfortunately neither the designer nor the NRC had taken any steps to correct the problem. Had it been done, we would have never heard of Three Mile Island. I could always have found something else to fill this chapter.

Thus in some respects the NRC was right about safety. They failed by not acting when they should have. Safety concerns were too often ignored and this upset some

of the people at the NRC. In the mid-1970s a few employees left the agency for this very reason.

By this time it appeared that Unit 2 was getting back to normal and someone would have to go inside the plant. William Scranton III somehow got elected to go, so he did. He may have been in the bathroom when they asked for volunteers. He was fitted up in all kinds of protective gear, so much so that it took him almost an hour to get ready. I'm sure that this wasn't very comforting to anyone watching from the outside. Once inside he was unnerved. Who wouldn't have been? He saw water on the floor and realized that it was radioactive. After leaving the contaminated area, he was relieved and had received small amounts of radiation, but nothing crucial.

The problem seemed fixable. On Friday morning a cloud of radiation gas escaped to the outside. Dick Thornburgh was told to evacuate the entire area, but he realized that a mass exodus could cause huge problems and chaos. Soon a civil defense alarm went off in the town and life was imitating art. Just twelve days before, the motion picture *The China Syndrome* had opened in cinemas across the country. It was all about a meltdown at a nuclear power plant. Reference was made in the movie that this event could render an area the size of Pennsylvania uninhabitable.

Needless to say, the people were in a state of panic and terror. The amount of the radiation released wound up being overstated, but nerves weren't calmed. Journalists flocked to Harrisburg. Soon the press and the NRC were in conflict. Reporter Pintek was disgusted. At that point, he found himself no longer a journalist. He had become an angry citizen.

The NRC recommended that all pre-school- aged children and pregnant women leave the area. In the course of the five-day crisis, about 140,000 people within a fifteen mile radius of Unit 2 fled. It was a horrible and very emotional time for the residents. By this time President

Jimmy Carter had tried to reach the control room, but couldn't get through because of the communication problems. Eventually he did get in contact and soon he was to arrive personally for a visit.

The accident at Unit 2 was like a yo-yo. First there was a big problem, but then it wasn't as serious. Hours later, it became an issue again but later it turned out there was a misreading of the data. The path would revert once again to critical.

At NRC headquarters in Bethesda, the strain was increasing. Roger Mattson analyzed the information and discovered the possibility of a hydrogen bubble above the core. This could prevent cooling and lead to a meltdown. The people at Harrisburg didn't want to hear this. The press now used the term "meltdown." By Saturday morning news came out that the bubble could cause a dangerous explosion. Matters got worse when Mattson, who was away from the scene, surmised this could occur at any time.

At the plant, Harold Denton looked at the problem and didn't quite see the same doomsday scenario. He thought that there was no need to worry about an explosion in the near future. He was on site and analyzed the facts. Those nearby put more faith in Denton than in Mattson.

On Sunday, April 1, the President arrived. People who had not left the area saw the motorcade, cheered and were reassured, but probably voted for Reagan in the next election. When he arrived near the plant, he was told of two scenarios: if he didn't go inside, many would think that the situation was hopeless, but if he went inside and anything happened, that would be worse. He chose to enter the facility. He, Denton and Thornburgh were wearing plastic booties because of the contaminated water on the floor in the control room. It was an eerie feeling, but there was no explosion.

Before long it was discovered that Mattson's reasoning was based on a flaw in his calculations. He used

the wrong formula. And yet, none of the engineers and scientists had seen the mistake, except for Denton. The bubble may have been present, but the danger was nowhere near what Mattson had made it out to be. Carter left to return to Washington and the crisis was over. Despite the easing of tension, people were plagued by doubts for years to come.

The reactor shut down a month later and eventually remediation and cleanup was done. It cost about a billion dollars and wasn't completed until August 1993. Three years after the disaster at Unit 2, a robotic camera went down into the core. It was found that there had been a fifty percent meltdown. Following the accident, the NRC introduced more stringent requirements at nuclear installations. Since Three Mile Island, not a single nuclear power plant has been ordered in the United States. The NRC has stated that despite the meltdown, only small amounts of radiation were released. Some people believe in the tooth fairy, too.

Twenty-five years after the meltdown, people who lived nearby expressed their feelings. John Garnish, whose house was directly opposite the plant, left for Florida in 1983, came back five years later and then left for good two years after that. He witnessed the death of neighbors due to liver and brain cancer, while his sister battled breast cancer. He also mentioned that there was no reporting of the dead birds found at the time and the prevalent metallic taste in people's mouths even before the plant went into operation.

Robert Reid was mayor of Middletown from 1978 to 1994 and returned in that capacity in 2002. He stated that it took ten years before things came "close to normal" again. He refuses to go on the island and naturally won't ever enter the facility. He even brings home a Geiger counter with him on occasion.

Thomas Gerusky was head of the Pennsylvania Bureau of Radiation Protection and involved in cleanups at some of the country's most contaminated nuclear sites. He has his doubts about the future of nuclear power. He retired

in 1996 and moved back to Camp Hill, ten miles from Three Mile Island. He can't forget about the power plant, nor can the NRC, local politicians and the inhabitants of the town. It will always be on their minds.

In December 1979, Governor Thornburgh journeyed to the Soviet Union to talk with nuclear scientists and offer information on the mishap. The hosts said that the United States overdramatized the issue and arrogantly stated that their nuclear plants were flawless and in need of no worry about accidents. They said they were so safe that they could be installed in Red Square. The chapter that follows will talk about just how safe those installations are.

In the late 1980s, I had a contract at a nuclear power plant on Lake Ontario in Oswego, New York. By this time we were all aware of nuclear accidents and the China syndrome. I didn't work anywhere near the reactor, but I still felt uncomfortable being so close to the action. Probably even more unsettling were the ever-occurring announcements over the public address system. There would be a warning about a fire in panel #45 in building B and the fire department was to report immediately. Fifteen minutes later we would hear that the alarm was a false alarm. This scenario was a normal occurrence. I figured that if the alarm really wasn't false but only stated as such, it was not very safe being on the premises. On the other hand, what do you think about a place that has all these "false alarms?" Aren't those lies, too?

I have already described some of the problems dealing with creating bombs. It's true that the nuclear power plant creates energy and not bombs, but some of the same difficulties arise relative to the atom. An accident of any type can devastate huge areas and no one is exempt from the radiation and its effects. In addition, where do you store the radioactive waste? These two thoughts should convince anyone that it might be time to find a safer energy source as an alternative. Sadly, as I write this, *our* government wants

to use nuclear power – to an even greater degree than we currently employ – to solve the problems of global warming. Some people never learn.



## 9. Not so noble Chernobyl

Three hundred twenty kilometers from Minsk, the capital of White Russia, sits the town of Chernobyl with a population of 12,500. A short distance of three kilometers away can be found Pripyat, with approximately 45,000 people. About 135,000 people live within a thirty-mile radius of Chernobyl, the site of a nuclear power facility, consisting of four reactors, with two more planned. Units 1 and 2 were created in 1970 and units 3 and 4 in December 1983.

On the evening of April 25, 1986, unit 4 was to be shut down for annual maintenance. On that night, a test was to be performed on the turbine generator. Not much planning was done for the experiment, nor did management approve of it. Overall the staff at the time was not prepared for the test and unaware of what might ensue. To begin with, the reactor's emergency cooling system was shut down. This should not have been done. As the exercise proceeded, the operators did not reset the set point for the automatic control rods. Because of this, the power level of 700 megawatts (MW) intended for the experiment could not be reached. In fact they could only reach 200 MW, a far cry from what was necessary.

These were some of the problems, but there were more as the evening progressed, which should have dictated that the test shouldn't have gone on, or that at least something ought to have been done before continuing. The flow of events as they occurred only indicated that something disastrous was going to happen, and at 1:30 a.m. on April 26, two explosions rocked the plant. Sparks flew onto the roof and started a fire.

From what had taken place, you might conclude that the accident at the plant was caused by the operators. That certainly is possible, but perhaps not. There are indications that the reactor itself had problems. These could have led to the explosions and what the people in the control room did

may have had no effect whatsoever on the events that occurred on April 26, 1986. This reminds me of a conversation I had with my mother not long ago. She said that her azaleas hadn't bloomed in three years, but was told that beer would help in the process. I drank two beers, but they still didn't bloom, so she poured some really old brew around the plants and sure enough, she had flowers. If you think the alcohol directly caused this, it may not have been the case. The azaleas may have bloomed that year no matter what was poured on the plants. We just don't know. The same applies to Chernobyl and the truth may never be discovered.

Before long there were over thirty fires and firemen were summoned. They responded and did an excellent job in preventing things from getting worse. Unfortunately, radiation was spreading throughout the area and many people, including the firemen, died in the line of duty. A day later, all four units of the facility were shut down. By this time radiation had escaped and traveled wherever the wind carried it. If most of the people in the immediate area were not aware of what had happened, the population in Turkey, the United Kingdom and Sweden were, as they felt the effects of the fallout. By May 7th, the radiation had reached Iceland. I have read reports that radiation eventually reached the state of Connecticut.

Officials in Chernobyl downplayed what had happened. It took some time before anyone admitted to an accident at Unit 4. This same scenario had played out at Three Mile Island where it took time before officials admitted that there had been a mishap. That case involved a government where news wasn't suppressed under such circumstances, but Chernobyl was different. Russia was very secretive in its dealings. Deception was almost expected.

The Western press saw it a bit differently. They heard about the disaster and reported it in a way that upset the authorities at Unit 4. Their accounts may have exaggerated

the incidents at Chernobyl. Even if that were the case, the local news was engaged in covering up what had occurred. I found it interesting that if someone read an account by a British reporter, the obvious question that would come to mind is how and where he got his information. On the other hand, if that same individual read a story produced by Pravda, could that source really be trusted? Either way, it seems that the truth would have been hard to obtain.

If you read enough accounts of the happenings, eventually the truth will be known. Besides what I have outlined above, these are some of the facts that should lead you to decide what the truth is:

1) 135,000 people were evacuated from the immediate area to different housing. Sadly, where they were moved was not much safer than where they had been.

2) A great amount of effort was put out in decontaminating people, clothing, shoes and just about anything you can think of. This involved rinsing by hosing down the objects.

3) A great amount of soil and trees were hauled from the area and buried.

4) Hospitals were besieged with great numbers of people at different intervals after the tragedy. This applied especially to the children who had lived near the plant.

5) Vast amounts of lead, boron, dolomite, sand and clay were dropped onto the reactor. Eventually a 400,000 ton concrete sarcophagus covered Unit 4.

6) After a trip to the reactor site in June 1987 by the Western press, The Times made the following statement:

“The continuing dangers were quickly brought home when we were required to sign special forms and warned never to open bus windows or smoke in the 18-mile exclusion zone surrounding the plant. We were ordered never to step on to roadside verges, nor to drink water, and we had to wear dark glasses if the sun shines brightly.”

The number of people who died in the tragedy was listed as 31 with 24,000 injuries. The actual number of fatalities is difficult to assess. Even if specific counts could be established, it needs to be mentioned that the real effects of the Chernobyl disaster will not be known for years. This is true for any serious accident, especially nuclear ones. There is probably no way of determining how many died or were injured because of the explosions at Chernobyl. You can only make an estimated guess, which will be higher than the 31 and 24,000 above.

The lessons from Three Mile Island and Chernobyl should be obvious. Power created through nuclear plants is not as cheap as people think, if you weigh in the liability and health costs. These could be staggering. What makes this form of energy questionable is the radiation and disposal of spent nuclear fuel. There is no safe level of radiation. Where do you store the wastes from the process?

These considerations should be enough, but there is one other. No matter how much care is taken in a nuclear operation, there can always be accidents. No matter how safe the design and the number of precautions taken, these plants are run by humans, who can make mistakes. Even if the operation is taken over by robots, who do you think designed those machines? Again the answer is people. The question thus becomes not if an accident will take place but when.

## 10. The pall over Bhopal

One of the worst environmental disasters that ever happened took place on December 2, 1984 in Bhopal, the capital of Madhya Pradesh. It was a result of a gas leak at a Union Carbide plant that killed thousands of people in a very short period. The facility manufactured toxic pesticides and herbicides that were supposed to make the population's lives better. On that day from 16,000 to 30,000 people died and 500,000 were injured and hundreds of cats, dogs and birds perished, as did 4,000 cattle. Numerous plants were devastated and crops such as tomatoes, spinach and cauliflower were destroyed.

The process at the plant involved the reaction of carbon monoxide with chlorine to yield phosgene, which in turn reacted with monomethylamine to produce methyl isocyanate (MIC). MIC and alpha naphthol in combination produced carbaryl, which would be used for the final product, Sevin. Vast amounts of MIC were spewed into the air on that tragic day, but other chemicals played a part, namely hydrocyanic acid, phosgene and monomethylamine. There was a good chance that methyl isocyanate thermally decomposed to yield a group of other toxic substances, including cyanide and carbon monoxide.

The reason the plant was set up in Bhopal was to deal with various pests that were destroying the harvest and needed to be eliminated. Sevin was one chemical that would do this, as it had already been produced in the United States by Union Carbide at the Institute in the Kanawha Valley of West Virginia, home to a quarter of a million people. This facility was not far from Charleston as were two other chemical corporations, DuPont and Monsanto.

Great care was used in setting up the plant at the Institute, as MIC is without doubt one of the most dangerous compounds ever produced. Thus the workers were in danger as were the people in the area as well as the environment.

When toxicologists tested MIC on rats, the results were so horrifying that the company banned their publication. Other experiments showed that animals exposed to the vapors died almost instantly. Methyl isocyanate is known to burn the skin, cause permanent blindness and destroy the respiratory system.

To indicate how toxic MIC is, it was labeled with a skull and crossbones and the sign, "Fatal if inhaled." MIC in combination with a few drops of water or a bit of metal dust results in a violent reaction. It needs to be stored at zero degrees centigrade. Under the influence of heat, MIC breaks down into several potentially fatal molecules, one of which is hydrocyanic acid. Shouldn't all this information have led the corporation to find an alternative to what was being produced? I'm sure CEOs lived quite a distance from the plant, maybe in another state.

Those who worked at the Institute knew of the dangers and safety was emphasized. Despite that, during the years 1980 to 1984, at least sixty- one leaks of MIC occurred at the facility. In the early 1970s, a health survey revealed that the number of cancers in the area around the valley were twenty percent higher than the national average, as were incidents of leukemia, endocrine and lung cancer. Another study showed that valley residents had twice as many tumors as the national average. On March 28, 1985, there was an amethyl oxide leak at the Institute. Eight workers were poisoned. Later that same year on August 11, another leak of aldicarb oxime injured 135 laborers.

On the other side of the world, the facility in Bhopal opened for production on May 4, 1980. The Institute had strict procedures for safety, whereas the Bhopal plant was deficient in that regard. It had to do with cutbacks and saving money. After a time, the facility in India was ignored and written off. As time progressed, many of the most experienced workers at the plant were no longer around.

Safety was being compromised and soon it was starting to show.

On December 23, 1981 Mohammed Ashraf had been killed in an accident while performing a maintenance operation. On February 10, 1982, twenty-five workers were poisoned but fortunately no one perished. Then on October 5, 1982 another accident occurred when some pipes broke. Again there were no deaths. There were other accidents as community residents constantly heard the alarms going off. Things would get much worse.

On September 11, 1984 Union Carbide produced a document detailing various safety problems at the West Virginia Institute. It was mentioned that the potential hazard could cause a serious accident. Sixteen Union Carbide executives got the message but it wasn't sent to anyone in Bhopal. The parent company had no concern for their plant in Bhopal and plans were made to move it to Brazil. On October 26, 1984, the plant in India stopped production. Safety systems were deactivated.

MIC was still on the premises and thus workers had to be around to keep everything in order. On the night of December 2, 1984, forty-two tons of MIC leaked into the air and many innocent people died or were permanently injured. In a shareholder reassurance move Union Carbide said that 1,754 people had died. Much more reliable estimates gave the number at 8,000, but it was probably closer to double that. The actual number will probably never be known. Many of the dead were buried in mass graves because of the health hazards and thus an accurate count could not be taken. Some people were visitors to the area who may have returned home only to die later. There is no doubt that the victims suffered greatly. You can only get a feel for what the people went through by reading about it, provided you have a very strong stomach. I had a tough time with the narrative.

Shortly after the tragedy, Warren Anderson, the president of Union Carbide decided to fly to Bhopal as a

goodwill measure. Because of what had happened and the recent assassination of Indira Gandhi, he was advised not to make the trip. He went anyway but not long after his arrival was arrested. He was soon released and on his way back to the States, having accomplished nothing of significance in Bhopal. He did offer \$5 million worth of emergency aid.

Soon the ambulance chasers got into the act. The amount of the suit was for \$15 billion – certainly justified if you consider the number of casualties, and a bit more than Anderson’s offer. Naturally, Union Carbide refused to take the blame for what had occurred. In fact, they said it was an act of sabotage. Perhaps it was, but it turns out the saboteur was the parent company distorting the truth. There is documentation to show that this lame theory of blame had huge technical holes. Still, Union Carbide did all it could to uphold the reputation of the company, but not long after that fatal night there was another leak at the same location in Bhopal when one hundred tons of chlorine were being transferred to tank cars for resale.

The guilty parties of the Bhopal disaster are Union Carbide and the government of India, for allowing this chemical manufacturing plant to be built so close to the people. A better location could have been found. Moreover, because of the toxicity of the chemicals, it may have been a better idea to never have produced them anywhere. Nonetheless, Union Carbide India did set up the facility under the direction of the mother corporation, Union Carbide. The local company had made suggestions for the safety of the operation, which were overruled by the worldwide corporation.

At the same time, headquarters demanded so many cutbacks in staff that experienced people were hardly to be found on location. Safety and security were sacrificed because they would cut into profits. There were numerous other issues that led up to the night of December 2. The accident was just waiting to happen.

We don't have to ask if Bhopal can occur again anywhere, whether in Europe or the United States. It's just a matter of time. The state of New Jersey is one such time bomb, with all its chemical plants and industry. What about the southeastern part of the United States along the Gulf Coast? Texas has its refineries and Louisiana its PVC factories and paper mills. There are other locales with the same problems.

Over a five-year period in the 1980s, over 6,900 accidents dealing with toxic chemicals were reported. Doing the math, that's almost four a day! These disasters killed 135 people and injured 1,500. What about the mishaps that were not reported?

As far as the lawsuit goes, eventually Union Carbide offered to pay \$470 million. This meant that the half a million survivors received about \$1400 each for a parent who had perished and about half that for a personal injury. Union Carbide no longer exists because it was bought out by Dow Chemical and the French enterprise Rhone-Poulenc. Warren Anderson left the company in 1986 to retire to Vero Beach. His whereabouts today are unknown. He's probably sipping pina coladas on a beach somewhere without any chemical plants.



## 11. The cry over spilled oil

September 11, 2001 is a day that no one will ever forget. Yet, it never should have happened. First of all, there was intelligence about the plot, but it was never compiled to prevent what took place. Over and above gathering information, another cause for the day should be obvious to all of us: oil. They say that whoever controls the oil, has the power. If you don't have it, you need to get control of the resource, and that's exactly the problem.

The United States has had armed forces in various places throughout the world. Years ago it may have been necessary, but today it certainly isn't. The military's presence in the Middle East directly caused the terrorist acts in New York City, Washington, DC and western Pennsylvania. Had there been no U.S. troops in the Persian Gulf during the 1990s and the decade that followed, most likely the World Trade Center would still be standing today.

I was in Manhattan on October 11, 2001. It was an eerie feeling and a very emotional day for me. Seeing all the armed forces in Grand Central Station was disconcerting. It's even worse when a foreign nation stations armed troops in your country. Imagine flying to Bolivia and getting off the plane to be greeted by soldiers with AK-47s. It can't be too pleasant an occasion for anyone. Now imagine that the troops are from a nation other than Bolivia. The fear factor has just increased by 100 percent.

Dependency on oil from a foreign country is no way to run an effective energy policy. If the country that is the source of the oil is democratic, that's one thing. If the country is in a volatile area, that's worse. The best solution is to have a policy that doesn't rely on energy from another nation. An even better policy – one that would alleviate the problem of global warming – is one that uses alternative energy and gets away from fossil fuels. The Bush-Cheney

presidency doesn't come close to a decent energy policy for any nation.

The 1970s were a time when we should have learned something. Some people may have had a glimpse into the future during the oil crisis of that period. Rationing was in effect and you had to make sure you had enough gas in your car because you were limited to when you could purchase it. If your license plate ended in an odd number, you could only buy gas on a day of the month that was odd. A similar scenario applied to plates that ended in even numbers, unless you were a Congressman. If you had vanity plates, you had to wait until February 29th. I'm kidding – most of those individuals in the nation's capital never drove so they didn't have a concern. All this trouble was caused because the United States was not self-sufficient in the area of energy. It had to rely on other nations for that resource.

Some good came out of that mess, as people were encouraged to conserve energy, not a bad idea and not much of an inconvenience. The heat was lowered in the winter and the air conditioning wasn't turned down so low in the summer. This process helped and people bought more fuel-efficient cars. President Jimmy Carter encouraged this attitude and people did their part. Unfortunately, he was defeated in the 1980 election and so was his energy policy. From that point on, there was neither an energy policy nor any concern for usage. Conservation and good mileage were a thing of the past and smaller cars were replaced with gas-guzzlers such as trucks and SUVs.

Looking back at some of the past environmental disasters, it is possible that a majority could have been avoided had the United States come up with a policy that used renewable energy. Thus we may have never heard of Three Mile Island, the Exxon Valdez and September 11th. Of course, the crisis at the pumps in the 1970s resulted in not much being done for energy policy in the decades that followed.

A partial solution had already been discovered years before when oil was found beneath the tundra of the North Slope of Alaska in early 1968. Tests indicated that there were in excess of ten billion barrels of oil and twenty-six trillion cubic feet of gas. Within three years oil companies had paid \$900 million to the federal government for leases in the area. The proposal was for a pipeline from the source of the oil to Prince William Sound. There the oil would be loaded onto tankers to be shipped to points south. There was another possibility: build the pipeline through Canada and eliminate the need for tankers. This may have been a safer alternative with many other advantages, but the proposal was voted down.

Seven oil companies formed a consortium called Alyeska and along with the state of Alaska and Vice President Spiro Agnew, they got their wish for the pipeline / tanker idea. The oil really turned things around for residents of Alaska. First the state tax was abolished. Soon each resident received a check each year for at least \$800, thanks to the success of the oil business.

Before this windfall, there was much discussion about the safety of the operation by environmental groups as well as the residents, including the fishermen who relied on the sea for a living. Promises were made by Alyeska and the oil corporations, saying they would develop the ability to provide emergency cleanup in the event of an oil spill.

As the years progressed, there were small spills but the news was that either they were insignificant or they had been cleaned up. Valdez is a town in Prince William Sound, site of eighteen huge storage tanks. It is here that tankers load up for their journey to the lower United States. Perhaps supertanker is a more appropriate word than tanker. These oil vessels are over nine hundred feet long. To get a feel for the size of one of these monsters, it's the length of three football fields. At the present time, around seventy five of these vessels come to Valdez each month.

John Devens, the mayor of Valdez, was aware of potential problems regarding spills, so he decided to use property taxes to build up a response team for cleanup. Alyeska, which had gotten rid of its spill containment team in 1982, told him that it really wasn't necessary. They made this statement even though the Valdez run was thirteen percent of the tanker traffic but accounted for over half of the accidents.

As it happened, there really wasn't a response team set up by anyone. The best solution was to have an independent group ready to handle spills, paid for by the corporation that was responsible for the mishap. Having Exxon or whoever did the damage be in charge of this cleanup wasn't a great idea, like putting a politician in charge of the 9-11 Commission. That operation would have been minimal. Unfortunately, even that idea may never have worked, due to the enormous amounts of oil being shipped. Nevertheless, a serious effort would certainly have left the environment in better shape than was the case in 1989.

On March 23, 1989 the Exxon Valdez was getting loaded for its five-day trip to Long Beach, California. It was a 987-foot supertanker, the best-equipped ship in Exxon's fleet, captained by forty-two year old Joseph Hazelwood. Its cargo was to be 1,264,164 barrels of crude. The trip was anticipated by the captain as a routine journey through Prince William Sound to its destination. Perhaps some of the oil reached California, but not the Exxon Valdez!

Before disembarking, there were a few problems. First, there was ice in the Sound and the crew could have waited a day to depart, but Hazelwood decided not to delay. Second, navigating the Sound wasn't that simple, especially that night when there was limited visibility. Third, radar coverage tended to fade as you moved into the area. The tracking system needed improvements, but they never came. Last, the captain had a few drinks before stepping onto the vessel. You might say the captain's vision was a bit "hazy."

Harbor pilot Ed Murphy took over the wheel for Hazelwood, because the latter left the bridge. Maybe he was getting thirsty. This abandonment was against company policy. It wasn't long before Murphy returned control to the captain, who noticed large chunks of ice from the Columbia Glacier floating in the sound. Some were the size of cars but not really a problem for the tanker, but there were others the size of houses, which could be a concern. Joe Hazelwood notified the Coast Guard that because of this ice, he was going to decrease his speed, but he didn't do that.

He turned over controls to Third Mate Gregory Cousins and went below. Cousins had never been in this situation before regarding maneuvers under these circumstances, but he said he could handle it. Now, he was the only one on the bridge, which was against Coast Guard procedures. At 12:04 a.m., the tanker ground to a halt on Blich Reef. The vessel was rapidly losing oil into the sea. At 12:27 a.m., Hazelwood radioed the Coast Guard of his predicament. Soon Alyeska was notified of the mishap and before long, chaos ensued.

The fatal mistake was Hazelwood's leaving the bridge. His having a few drinks didn't help the situation. At the time of the accident, his driver's license was revoked. It had been suspended three times for drunk driving violations since 1984. Why had the Coast Guard in their certification of tanker captains not done something to see to it that Hazelwood was prohibited from piloting a vessel until he had come clean? He may have been a great captain and navigator, but not so when he was drunk. Ed Murphy had noticed alcohol on his breath, but had done nothing about it. Eventually, ten million gallons of oil were released into the sea.

The cleanup might have limited the spill, except no one rushed to do much. Remember, Alyeska had abandoned their procedures, and the mayor's efforts to be ready for just this scenario were thwarted. Exxon took over the

responsibility of cleanup, but they too were limited because they couldn't handle the volume. Besides extracting the liquid, or skimming, there were suggestions about burning off the oil as well as using chemical dispersants. The last option was like using detergent, as it left the oil without removing it. This option could be worse than doing nothing.

All three options were tried, but the lack of resources limited the success. After the first day, less than 1,000 barrels of oil had been reclaimed by the skimming equipment of Alyeska. It seemed this method wouldn't work. Perhaps the cleanup would have progressed better had the Keystone Cops done it. The whole scene looked like the latter were running the show. It was a mess in more ways than the obvious. Fishermen of the area tried to help clean up the oil. On their first day, they scooped 1,500 gallons of the oil, and 2,500 gallons on their best day. Exxon's best skimmer collected only 1,200 gallons a day.

Miraculously, some of the fish hatcheries were saved and over time, 100,000 gallons of oil were removed from the sound. Unfortunately, hundreds of thousands of birds perished, as did thousands of otters and numerous other species of wildlife. The fishermen and townspeople were angry and upset. The blame for the catastrophe rested on the people of Alaska, the Department of the Interior, the State of Alaska, Alyeska, the Coast Guard, Joseph Hazelwood, the Fish and Wildlife Service and Exxon, for starters. Greed was at the root of the spill. Ultimately though, the main culprit was Exxon.

On January 1, 1990, a pipeline between New Jersey and Staten Island broke, leaking over 500,000 gallons of heating fuel into surrounding wetlands. There was an early alarm of the rupture, but it was ignored and the flow was not cut off for six hours. The pipeline belonged to Exxon.

Exxon was also responsible for the multi-billion gallon spill in Newtown Creek, just east of Manhattan Island, that has slowly been leaking for years. They are

trying to cover it up, but Riverkeeper is exerting pressure to make them pay for this unconscionably criminal behavior. In addition, Exxon is one of the largest contributors of campaign funds to President Bush and the Republican Party and they have a huge role at the bargaining table for many of the energy decisions that Cheney and his cronies have made for our country. Of course, this policy has not been revealed to very many citizens.

The Valdez incident has been repeated over the years. In November 2002, the Prestige sank off the coast of northern Spain. It was carrying over twenty-two million gallons of crude oil number 4, one of the most toxic fuel oils around. The tanker sailed from Russia where Captain Esfraitos Kostazis warned that the vessel needed repairs. Instead of taking care of the problem, the captain was replaced with Apostolos Mangouras and the ship was on its way.

The actual ownership of the supertanker was hidden in layers of front companies and deception. The real owners of the Bahamian-flagged tanker were Greek, but it was registered through Liberia. The vessel was twenty-six years old, rusting and should have been retired. The American Bureau of Shipping, a Houston based company, inspected the ship six months before the accident and found nothing wrong with it. Eventually the ship sank to the bottom of the sea, where it was hoped the oil would congeal and not do further harm. Don't bet too much money on that transpiring.

Of course, ships can cause pollution years after they sink. In 2001, a series of oil slicks were noticed off the coast of California. These were traced back to a mishap of a freighter than occurred in 1953. Meanwhile, in Scotland oil is leaking from a warship that sank during the Second World War. This oozing has been happening for over fifty years.

There are numerous similar incidents of oil spills that we don't even know about. The seriousness of the spills varies, but all are harmful to the environment. In early 2004,

a freighter carrying stone, heavy oil, diesel fuel and lubricating oil bound for Germany capsized off the coast of Norway. Thirty people were on board, but only twelve were rescued. Once again the sea, human beings, wildlife and the coast were affected.

## 12. Plastics are the future

You've heard the expression, "Better living through chemistry," but I have some doubts. Consider the chemicals that people have sprayed on their lawns. You are not supposed to go near them or let children or pets play on them for twenty-four hours. Why, after that time, is the grass then safe to be around? On one occasion on my way into my home – the condominium I moved into after selling my house in East Aurora – a guy was applying something to the grass. As I walked by, he stopped the process and allowed me to pass before continuing. My question is why did he do that? Was the chemical so bad that this had to be done? Worse yet, he had on no special clothes. What about his health? Maybe he thought he was Superman. Spiderman would have known better.

Toxic warnings on signs and products might indicate that you would be better off not using these chemicals. Just consider some of those agents. Some work, but some are nothing more than a waste of money. What is worse is the problem of disposing of the unused contents of the can. You'd better not throw the container into the trash because of all the toxicity therein.

A few years ago, I worked at a chemical plant. The product was a type of paint that was supposed to restore your car's finish to its original luster. Thankfully, I didn't stay long on this job but I was there long enough to realize that the product was toxic and didn't perform as indicated. I heard that the company got many letters from customers complaining about the product. They wanted a refund but I doubt that they ever received any. The production was just a slick way of getting rich while at the same time messing up the environment. Many years before, I interviewed for a job at a major chemical company whose name I mentioned earlier, but didn't land a contract. I look back now and am thoroughly grateful that I wasn't hired.

The toxic pest control DDT was taken off the market a few years ago. It just wasn't safe. Even after being taken off the market, its effects are still with us and will be for years to come. Of course, there are substitutes for it, which may not be much better. Any chemical that you use to spray fruit and vegetables has potential problems. For one thing, you may be spreading poison on something you will be eating. Then, even if your pears and cabbage are safe after application of the chemical, you may be doing harm to the air and soil in your backyard. This may not be a good idea if you have cows, ducks and chickens behind your house or dogs and cats. Last but not least, you may be creating an environment where bugs soon become immune to your pesticides.

You may remember the time when red dye #2 was removed from the stores. I'm sure you can recall many other products that are no longer for sale because they weren't safe. I recall some instances where an item was rendered not fit for consumption, but it remained on the shelves until it was sold out. At that point, no more of the product would be stocked. That seems very unreasonable to me. Besides the danger to consumers, if the product stayed on the shelf, the company responsible for it was taking a huge risk that there would be a lawsuit by the users.

In years past, paints were lead-based. This may not affect adults, but this substance shouldn't be used in a house with children. There may have been other toxic ingredients in the paint. While living in my first house, I used paint remover to get down to the bare wood of a window frame. Just opening the can and breathing the fumes should tell you that this liquid may be able to do the job, but it certainly is not safe or environmentally friendly. As bad as that is, what kind of other bad fumes are created when the paint remover gets in contact with the old paint?

Through college I worked at a supermarket and we burned the cardboard containers from the groceries in an

incinerator. This is not done anymore because it just isn't safe. There's too much junk being thrown into the air. Consider the makeup of a cardboard box or a newspaper for that matter. Burning either of these will create carcinogens just because of the composition of the paper. There's the bleaching process as well as the ink to be considered. That may not have been the case years ago, as all they were burning was unembellished paper, so it may have been safe to do so. Today, there is very little material that can be safely burned.

Yet burn barrels can be found in many homeowners' backyards for burning tree branches, leaves and wastepaper. There is a law to try to eliminate these barrels, but the people are fighting it, even though the legislation is in their own best interest. Old habits die hard.

In an earlier chapter I mentioned the environmental hazards of building bombs, but there is also danger to the planet because of the greed and blatant law violations of refineries, chemical companies and paper mills. Safety is compromised inside the building, and the land, air and water outside is in danger. In some cases, following strict restrictions may improve matters. In some instances though, because of the product, the plant that creates it will never be acceptable to the environment.

If you saw the movie *The Graduate*, you may recall that the future was to be in "plastics." This was the investment that couldn't fail. There is an area in Texas and Louisiana called Cancer Alley. It is dominated by big business and the chemical companies who developed polyvinyl chloride, or PVC, a type of plastic. Vinyl chloride is a colorless flammable gas that goes into making PVC. Today, you can see PVC or vinyl everywhere in all kinds of products.

Mossville is a predominately African-American town near Lake Charles, Louisiana with four polyvinyl chloride facilities. Production began in the middle of the twentieth

century when various companies began producing plastic. Many of them found that this endeavor was hazardous to the health of the employees. The federal Agency for Toxic Substances has shown that breathing vinyl chloride for long periods of time can result in damage to the liver and nerves and cause liver cancer and immune reactions. The corporations had knowledge of these dangers but failed to inform the workers of them. Instead they developed a plan to cover up this problem and PVC saw no decrease in output.

But the health of some of the laborers was affected. The chemicals involved were so devastating that some of the bones in the hands of those working in the plant actually dissolved. Others suffered brain damage from being on the scene and there were other problems as well. Eventually, these companies were exposed, but not before too many workers had died or suffered severe consequences. I need not tell you that the air, land and water nearby were also devastated.

In Venice, Italy, PVC was produced as well, and workers suffered through many illnesses and died. The widows of the deceased had a lawsuit, but not against the corporation producing vinyl. Rather, the defendants in the case were executives of the company, and the charge was manslaughter. Unfortunately, justice was not served. The plaintiffs lost in their efforts. While this was occurring, the foreign company conspired with its sister companies in the United States to guarantee that PVC was judged by the American people to be a safe product, despite all that had happened indicating just the opposite.

Plastic has one characteristic that was hailed as a breakthrough: its permanence. But that same feature can also lead to many problems, including how to get rid of it. It can sit in a landfill for years and stay unchanged. If you trash it, it may wind up being incinerated. As you can guess, burning this matter is much worse than burning paper. According to a Tufts University study, "Vinyl products tend to smolder long

before they burn, releasing toxic fumes in fires.” Companies that collect trash and incinerate it can’t be helping the planet. Dioxin is a byproduct of this burning, and it stays around forever, getting into animals, plants and the food chain. Eventually, it is in our bodies and can affect the reproductive system and immune system, and cause diabetes, skin and liver cancer.

Those in the industry say that everything is being checked and there’s no danger to the planet, but I would like to know where they bought monitoring equipment. PVC is unsafe, as is chlorine, the gas used to produce it. The health of the workers in a plant where it is produced is in danger and the environment outside the plant is compromised, affecting the community. Lastly, PVC cannot be safely recycled.

Much of the information above was depicted in a program on Public Television called “Trade Secrets: A Moyers Report,” broadcast on March 13, 2002. At the end of the presentation a panel of “experts” from both the chemical companies as well as the environment had a chance to respond to the proceedings. The way I saw it, Bill Moyers established his case against the PVC producer. He did his homework and stood up to the chemical industry. The representative of the chemical faction and the lawyer for that cause seemed to be continuing the cover-up that has been taking place since PVC started being produced in the 1950s.

I thought it was interesting that this individual from the chemical industry mentioned that the host was probably alive because of what chemistry had contributed to the quality of his life. Drugs and health advances seemed to have saved many people who were afflicted with various ailments. These same people would probably not have survived with the same problems sixty years ago. That may certainly have been true, but it also is very possible that the illness itself was caused by “better living through chemistry.”

You can get more insight into the vinyl industry by viewing an entertaining but informative movie, “Blue Vinyl.” It was produced for HBO by Judith Helfand and Daniel Gold. By all means visit the corresponding web site, **[bluevinyl.org](http://bluevinyl.org)**.

### 13. Lois and Love Canal

In the summer of 2003, I had the pleasure of working with and listening to Lois Marie Gibbs speak to a full crowd of people at a fire hall in Niagara Falls. This was a celebration of the twenty-fifth anniversary of Love Canal, and her speech was eloquent and inspiring. She thanked all of us there for our efforts and offered hope that they would not be in vain, even though it might take time. This was a different woman from the one of over a quarter century ago.

Lois was a shy housewife in the summer of 1978. She lived on 101st Street in a modest three bedroom home outside Niagara Falls with her husband Harry and three-year-old daughter Melissa and six-year-old son Michael. Like most of us, our heroine wasn't thrilled about public speaking. In fact as a teenager when she had to give a book report, she avoided the issue by skipping school. However, this was to change and this woman would soon be transformed. Before going into any further details, it is necessary to go into a short history of the area.

In 1892, William T. Love proposed digging a seven-mile canal to connect the upper and lower Niagara River. The purpose was to create a natural waterfall that would generate electricity for the area. Work began but the country fell into a depression and it was abandoned. In 1920 the land became a municipal and chemical disposal site until 1953. In 1953, Hooker Chemical (a subsidiary of Occidental Petroleum) filled the canal, covered it with dirt and sold it to the Board of Education for one dollar. That amount again was \$1. The deed contained a stipulation that Hooker would not be responsible for any physical harm or death due to the buried wastes. I think I smell a rat! Soon after that, homes were built on the site, and in 1955 an elementary school near the corner of the canal was opened. In the later 1950s, residents complained about the black sludge, horrific odors

and injury to the children, but all their pleas went unanswered.

The chemical company admits to burying 22,000 tons of chemicals in the canal, but this is all they will admit to. The Army denies burying wastes but residents testified to seeing Army people and trucks on site. In the area, at least twelve known carcinogens had been identified. There were problems well before the 1970s, but it wasn't until 1978 when changes occurred.

Lois Gibbs read about the dangers of the chemicals that had been dumped into the canal in a Niagara Falls Gazette article by Michael Brown. She soon found that this was not the first piece done on Love Canal. At first she thought little of the problem since her house was not that close to the hazardous waste. But then her son Michael began school and started having seizures and soon developed epilepsy. Lois then realized what the problem was, namely the school was built on a toxic dump.

She tried to get Michael transferred to another school because of her son's health and the superintendent asked for letters from two doctors, which Mrs. Gibbs provided. Later when she talked to the same person, he implied that he had never received the notes. However, from what he was saying, it soon became evident to Lois that he had them after all. He was lying but still wouldn't approve of the transfer for Michael. This shy housewife was furious and called the head of the PTA, but she seemed uninterested.

Despite her inexperience, Lois then decided to get some petitions so she left her house and rang a neighbor's doorbell. But no one answered. She left and headed home and wondered what she was doing, not unlike what many of us would feel under these same circumstances. When she sat down, she realized that the task was a tough one, but she had to do something. She would start out again the next day, resolved not to quit. She started talking to people on the street and people were concerned. They wanted to know

more about Love Canal. One of the women she met had been organizing to do something as well, but she didn't want to deal with Lois, even though the latter was willing to work alongside her.

It wasn't long before Gibbs was overwhelmed by the noxious smells of the canal. What was worse was that she discovered that the entire community was sick. Her neighbor suffered from severe migraines and had been hospitalized on numerous occasions that year. The woman's daughter had kidney problems and others had gastrointestinal problems and lung cancer. But it wasn't the only type of cancer.

In June 1978 the New York State Department of Health held a public meeting. Officials indicated that they wanted to do some health studies. Unfortunately, representatives appeared to be speaking in another language and didn't calm any of the people gathered there. They either couldn't or just simply didn't answer any of the questions, saying that they would look into the matter and that it might take some time. The people were told not to eat vegetables from their gardens. But that only brought up the question of how safe it was to be outside in the yard. That issue was skirted. The people were frustrated and became frightened.

But Lois pressed on, not surrendering. Before long she met some individuals who were with her all the way and soon a coalition was formed. They talked to a lawyer and decided to begin a lawsuit against Hooker Chemical, the City and Board of Education of Niagara Falls and Niagara County. Soon the Health Department released information from their studies. Some of the chemicals found in the canal included chloroform, toluene, tetrachloroethylene, trichloroethylene and benzene. They gave a list of these for each home with numbers. Unfortunately, the numbers were meaningless and didn't reassure the people in any way.

There was to be an open meeting on the problems in the neighborhood on August 2, 1978 in Albany. Lois, her husband Harry and their good friend Debbie Cerrillo made

the journey by car on the day before. Debbie had suffered through two miscarriages and occasionally experienced heavy bleeding. The rate of miscarriages in the area was fifty percent higher than normal. Politicians and health officials knew about the problems in Love Canal, but nothing was done about it. On the day of the meeting, not much seemed to get accomplished. There was a great deal of frustration for the travelers from upstate, especially when they were told that pregnant women and children under the age of two were to be evacuated from the area. Did that mean it was safe for kids over the age of two and retirees to live in that contaminated community?

There was a break in the meeting and when it resumed, a plan was outlined for remediation. There was a great deal of scientific jargon and stonewalling, but not much forward movement. Finally Dr. David Axelrod, the commissioner of the New York State Department of Health indicated that there would be a public meeting in Niagara Falls the next day. Despite the difficulties, Lois and her group did have some influence on the department. The fact that there would be a gathering in their hometown indicated that, and at least there was some hope.

The crew left Albany and drove back to Niagara Falls, tired and frustrated. They hadn't had more than a couple hours' sleep the night before. When they arrived home, they were running on empty and were told that a meeting was taking place that night. It would be a few hours before they could rest and relax.

Lois was brought to the podium to talk, but she was nervous. This was her baptism into public speaking. Nonetheless, she managed, and relayed what had occurred downstate. Perhaps it is better to say that almost nothing happened. The residents were upset, nervous and scared. Lois then brought up the meeting for the following night.

The next evening, officials appeared for the assembly, but Governor Hugh Carey was missing. It was an

election year and he was out campaigning. Apparently getting elected was more important than the health issues of a town. The meeting only succeeded in upsetting the people of Love Canal and increasing their frustrations.

A day later another meeting was held, without any health officials. The Love Canal Homeowners Association (LCHA) was formed, with Lois being elected president, Tom Heisner vice president, Karen Schroeder secretary and Debbie Cerrillo treasurer. Four goals were set for the organization: evacuation and relocation of the residents, canal cleanup, boosting property values and sampling of the air, water and soil. Congressman John LaFalce was in attendance and soon became an ally of the group in their cause. He stated that he would try to obtain four million dollars from the federal government for the area.

The next day, August 5th, brought officials from the Federal Disaster Assistance Administration to talk with the town people and to size up the problems. Two days later, the governor finally showed up. There was plenty of television coverage, but not much was said about cleanup and what the government would do for the people. There were heated arguments and finally Governor Carey said he would buy the homes in the first and second ring. Of course, just because a politician says he will do something doesn't mean it will get accomplished.

Lois and the other LCHA members' lives were completely changed. They didn't get much sleep and saw little of their families. Over the next few months they would learn that most of the people in government acted only in their own interests and rarely helped their constituents. Organizations, like the Department of Health, which were supposed to help people in need, accomplished little, made excuses and took forever to get anything done.

Over the next few months, Lois traveled to Albany, Washington, DC and even appeared on the Phil Donahue Show. She got great coverage in the local as well as the

national press. She also met people who cared about the problems of the canal, specifically Doctor Beverly Paigen of the Roswell Park Memorial Institute in Buffalo. The two worked on health studies for the area, even creating maps and plotting different problems by clusters. These charts brought out what was really happening. When this data was presented to the health officials, the latter said these were statistics collected by housewives and therefore unreliable. And yet they had no data themselves, or wouldn't share it.

Despite all the efforts of the LCHA, not much was accomplished. The Health Department stalled and stonewalled matters and Lois and the group were disgusted. She asked for information, but they wouldn't supply it. Then when the department finally asked for her data, she refused since they didn't give her any of theirs. Then she said that it wouldn't be valid since it came from some housewives. There was gridlock, but on Monday, May 19, 1980 the EPA came to the rescue. Perhaps it's more appropriate to say that the EPA got rescued.

On that day a doctor and a public relations representative of the EPA arrived at the office of the LCHA. It wasn't long before they were told that they were hostages of the Love Canal people. There was a crowd outside the office and it grew bigger and things got uglier as the day progressed. It reached the point where Lois said she was holding them in the building to protect them from the mob, which might do them harm. The crisis did bring attention to the issue and eventually Congressman LaFalce promised to call President Jimmy Carter. There was to be a phone call by twelve noon the next day with a resolution. Somehow the hostages were moved away in a police car and they were fine. No charges were pressed against Lois or her group.

At a few minutes after twelve the next day, word came from Washington that 810 families in the community would be evacuated. They could move to any hotel, motel or apartment they chose and the Federal Disaster Assistance

Administration would pay for the cost. Finally, the people had won.

Eventually, Occidental Petroleum paid \$98 million to the state for cleanup, tests, relocation, the houses and more. \$129 million settled the federal case. The residents also filed suits, for which most people got about \$10,000. Of course, the damage was done to the health and lives of the residents. The Love Canal people would never be the same. You can read more about it in Lois Marie Gibbs' book, *Love Canal: The Story Continues*. She moved to Virginia with her children and founded the Center for Health, Environment and Justice. Her web site is **chej.org**.



## 14. Klobbered by Katrina

Natural disasters have always been a problem for the planet. With global warming, they're still around, but with more intensity. Failure to address environmental concerns has had devastating effects on our land, air and water on many levels. One such devastating example fell upon the city of New Orleans on August 29, 2005 when hurricane Katrina hit the Gulf Coast.

A few considerations could have either prevented this disaster, or at least lessened the impact of that storm, such as measures being undertaken to address what fossil fuels have done on the warming of the planet. The possibilities for protection and prevention don't end there. Technology has given us advanced warning of coming tsunamis, tornadoes and earthquakes. As we progress, this knowledge ahead of time saves lives and resources. A year from now, meteorology will only get better in predicting the weather.

Unfortunately, the City of New Orleans is below sea level and vulnerable to flooding. It has been that way for quite a while and levees were constructed to cover this deficiency. Over time, this engineering feat has done its job in fine fashion. As with all things though, maintenance is required, meaning funds are necessary to see to it that deterioration doesn't occur. When it does, it has to be fixed to avoid problems. There was enough advance warning – not days before Katrina hit, but years – for action to be taken to guarantee that the levees wouldn't have a problem. Time and again, money was requested from the government, but it wasn't forthcoming. Had the cash been available, Katrina may have been nothing more than a tropical storm. Moreover, thousands of dollars would have been spent beforehand, instead of the millions it is taking for cleanup and remediation.

Warnings can be a great thing provided citizens have the resources to heed them. Vast areas in the Delta are inundated with people having the minimum of amenities. They certainly could have walked away from the danger if they had started well in advance of the storm – sometime in July would have sufficed. Of course, they needed to hear about the upcoming hurricane early enough. Mass transit could have been a great ally if it had been capable of handling the crowds. As history has shown, these alternatives failed for a number of reasons. Consequently, innocent people perished while others suffered greatly and lost their homes in the process.

One of the reasons for this is the fact that the City of New Orleans and the state of Louisiana aren't exactly free of political corruption. You may have heard of Huey Long and Carlos Marcello, one politician and another individual who had a great deal of control without being in the state legislature. Their home state certainly doesn't lead the United States in doing things on the sly with hands held open for payola. Both the town where I grew up and the city in which I now reside have known a bit of graft – although they can't be compared to our nation's capital. Other cities in our nation practice this way of doing business and get away with it. When Katrina hit, there was a conglomeration of incompetence and payoffs at the local, state and federal levels. This was evident well before August 29, 2005, during the crisis and after it. Even today, New Orleans is an area with much work that still needs to be done regarding cleanup – in more ways than one.

There are a few other resources that help to keep New Orleans honest, that is, to keep hurricanes at bay, minimizing catastrophes. Leading the way are the wetlands, which soak up incoming winds and water. They do an unbelievable job and all that is needed is that they be integral. When they get destroyed or neglected, difficulties can and will arise. For too long, these great resources were

ignored. Combining this abandonment with a few other already mentioned scenarios didn't help in the least.

Within the New Orleans swamp sit a large number of cypress trees, which also play a huge role in controlling what happens to the region as the levees and the wetlands. Over time though, big business felt that removing these majestic wonders of nature would bring more cash because of the value of the wood. That may be true, but the small increase in profits pales when weighed against the costs of cleanup incurred from Katrina. The CEOs never considered that at any time. It gets even worse as some businesses sell the wood for homes, but other corporations simply process it for mulch. It is truly ironic that this product was to be used around the houses that are rebuilt in the future, but at the same time the removal of the cypress trees for this purpose is one of the reasons for much of the damage caused by Katrina.

People exhibit some very risky behavior and then ask for forgiveness, handouts, tax benefits and insurance policies. Our Founding Fathers may have written laws for citizens to act at will – within reason, of course – but there is nothing in writing in those same documents that will guarantee payment of your hospital bills if you climb walls of ice. You'll have to open your own wallet for that. The same consideration applies to people who have homes constructed on cliffs overlooking the ocean, near raging rivers or in known earthquake regions. You can build anywhere you want, but you'll have to pay a hefty insurance premium to do so. Then, when disaster strikes and rebuilding is necessary – if you still feel that's a good idea – don't be surprised if the cost of the insurance doubles or triples.

Rebuilding the City of New Orleans must take into consideration this same outlook. I feel that it certainly should be restored to what it was. Of course, if in the process, much of the graft and corruption could be eradicated, that would be what's best for all of us. Perhaps New Orleans should be

reconstructed above sea level. Doing so would assure that there would never be a problem with levees again. It would also create numerous jobs, something which is needed right now in that area even if that fine city isn't elevated. Under any circumstances, changes have to be made to accommodate either choice and the wetlands need to be maintained, especially the cypress trees. If a company wants to sell mulch, they are going to have to obtain it from some place that won't be affected in any way by the removal of that great natural resource, the cypress.

## 15. Welcome to my toxic home

I was born in Buffalo and have lived about two thirds of my life in Western New York. From the early 1950s through the late 1960s, I lived at my parents' home in Cheektowaga. About a mile from this house, where I spent all my teenage years and some of my twenties, sits an area of the town called Bellevue. Within that small location can be found a stone quarry, asphalt business and three landfills. From my observations, these money-grabbing endeavors should not be here, because of the people living close by.

When the quarry is in operation, about a hundred trucks an hour leave with a load of crushed stone. They kick up a great deal of dust and are powered by diesel fuel, which is a known cause of asthma. When blasting occurs to create the deliverable product, nearby houses shake and some even experience destructive effects to the foundation. Electric light bulbs can break and damage occurs to the possessions inside houses. Two byproducts of this operation are silica and hydrogen sulfide, both harmful to human beings.

On February 24, 2004, there was a strong stench of rotten eggs in the neighborhood. The gas turned out to be hydrogen sulfide – a product of the quarry – so members of the Cheektowaga Citizens Coalition (CCC) brought out their specially designed buckets and scientifically captured an air sample in the manner of forensic police. I wasn't on the scene helping out in the process, as I was more concerned about another issue, which I will spend more time on later.

You can get more information on the "bucket brigade" in Chapter 19. The results from the lab showed 72.7 times the Environmental Protection Agency's acceptable rate for that gas. Exposure to low concentrations can cause eye irritation, sore throats, coughs, shortness of breath, and fluid in the lungs. These symptoms usually go away in a few weeks. Long-term, low-level exposure may result in fatigue, loss of appetite, headaches, irritability, poor memory,

dizziness, and loss of the sense of smell, which could be more than just temporary. Because it is heavier than air, hydrogen sulfide tends to sink, and children are more likely to be exposed to larger amounts than adults in the same situations. However, as the numbers indicated, this occurrence was not of a low dose.

In the fall of 2002, a black substance was seen oozing out of the ground across the street from the quarry. This was the site of the old Allied Bitumens Asphalt facility. Apparently some of the product had been buried underground some time ago and now was making an appearance where it shouldn't have. The ooze was found to contain benzene, a known carcinogen. As of this date, I am not sure of what anyone has done about this mess. My guess is that someone is "working" on it.

The landfills are an equal opportunity acceptor, that is, they will take any crap from everyone and anyone. But that is just the problem. Toxins, poisons and radioactive materials have all been dumped in the area. There is plenty of documentation about who dumped what, and reading it would probably make one want to move out of the area. Some people don't have that option – they developed cancer or some other disease and died. Others may have left Bellevue and carried their illnesses with them.

Of the people who still live in the neighborhood, many are sick and affected by cancers of all types, autoimmune diseases and asthma, to mention a few of the problems. I was a member of the CCC, which tried to take action against these businesses. But, as I pointed out, so many people in the community are sick, it is difficult to accomplish anything. Even if you are in good health, when politicians and members of the health department don't give you much support, you become tired and discouraged.

My mom has asthma and talks about all the sick people in Cheektowaga. She lived close to Bellevue for over fifty years and moved in October 2004 to an apartment not

that far away. Behind her former house sits the home of her hairdresser. She doesn't get her hair done there anymore since both the woman and her husband succumbed at an early age to cancer. My mother talks about many others around town who are sick and others who died very young. A friend of mine who lived a bit south of Bellevue lost his mom to cancer. His father is still alive, but he has prostate cancer. My friend mentioned that many young people he knew who lived close by have all died from that same disease. I met my friend's father in the summer of 2007, and fortunately he seems to be surviving and battling it quite well.

I became a member of the CCC by accident. In September 1998, I entered the emergency room of Sisters Hospital in Buffalo for a blockage in my colon. It was cancerous and I underwent a colostomy, which was reversed a few months later. Having spent time in Cheektowaga playing baseball less than a mile from the landfills and working in my father's garden and eating the vegetables he grew, I thought maybe there was a connection between my illness and Bellevue's toxic businesses. After all, my parents' house was downwind from the quarry and the landfills. It took a while, but I joined the coalition in 2001.

Since that time, my sister Pat was struck with ovarian cancer and at present, she is a cancer survivor. I was diagnosed with early stage prostate cancer in December 2003 and underwent removal of that organ in February 2004. That's why I wasn't assisting in capturing those samples with the bucket brigade that night in February. While recovering at home, I was soon found to have another cancerous mass in my colon. It was removed and for this cancer, as well as the prostate cancer, I needed neither chemotherapy nor radiation treatments. In 2006, my older brother, Nicholas, a Franciscan priest was in the hospital – with the same surgeon I had, Dr. Naim Dawli – for a colon resection, needed because he too was a victim of cancer. The

three of us are survivors – so far – and I pray daily that each of us, even my younger brother who hasn't experienced that disease yet, will be cancer free for the rest of our lives and not need any other surgery.

Bellevue has become another Love Canal or worse. The dumping of chemicals and radioactive materials started at about the same time that Hooker Chemical began their disposal of toxins into the canal in Niagara Falls. It took a while before people learned from Love Canal. Some corporations still don't act in a responsible manner and government agencies and health departments don't give communities much help when they need it. Unfortunately, there are other areas in Western New York, besides Love Canal and Bellevue, with similar problems.

At the end of the 1980s, the City of Buffalo purchased and began developing a site south of the city that had belonged to LTV Steel. They created a development of approximately sixty homes in the area, which also happened to be near a state Superfund site, but hidden from view by a berm. This effort would enable some people to be homeowners as well as provide the city with revenue from taxes. It sounded like a great opportunity at the time.

There was just one small problem: the land was not free of toxins and contaminants. The city didn't tell any of the new owners of these problems. It may not have realized that there was a concern, as they didn't test the ground and air beforehand. In 1993, long after the beginning of the project, a limited environmental evaluation was done. Another small assessment through an outside firm was begun two years later. However, both studies proved far from adequate as developers discovered refractory brick, an oozing dark substance and cindery coke wastes in what was to be the basement of a new home.

Development stopped at this point and sampling of the area found high levels of polynuclear aromatic hydrocarbons. This almost sounds pleasant, but these are

carcinogens linked to the manufacture of steel. Some of these hydrocarbons tested at very high levels. The Occupational Safety and Health Administration (OSHA) has set a limit of 0.2 milligrams of PAHs per cubic meter of air (0.2 mg/m<sup>3</sup>). There's more information about polynuclear aromatic hydrocarbons at [atsdr.cdc.gov/tfacts69.html](http://atsdr.cdc.gov/tfacts69.html).

Eventually, additional sampling was done and cleanup uncovered a leaking storage tank containing benzene. Speculation grew that this probably wasn't the only one buried in the area. At present, dug up material sits exposed across the street from Hickory Woods, creating a further concern for residents.

Jennifer and Patrick Blake are one couple who invested in the new development. They couldn't believe that they could be so lucky, but it wouldn't take long for that to change. They moved in, and before long they decided to put in a fence. In the process, they discovered that the soil was black, and this worried them, since they had no intention of growing licorice. Jennifer worked in the soil to satisfy her gardening habits. When her son Matthew was born, there was more concern. He had been born blind, with developmental disabilities. It wasn't until he was nine that he could walk and as of January 2008, he still couldn't see or speak.

Jennifer feels that her working the soil around the house is the reason for what Matthew is suffering, but she can't prove it. This is only one story of Hickory Woods, but it's not the only one. In the meantime, some people have moved away but others are in a financial bind and they have limited options. The City of Buffalo has not moved on the issue at all, so the people are forced to wait, something they have been doing for too long.

There's more information about Hickory Woods at [buffnet.net/~wren](http://buffnet.net/~wren).

You can travel south from Buffalo to the town of Gowanda. It's an area that is truly wild, with high cliffs, great trails and breathtaking views of Zoar Valley. Besides all this wonder, it has some problems. Some time ago, a tannery as well as a glue factory did business in the neighborhood and left its mark on many of the citizens of the town. The smell emanating from these enterprises was horrible and at least one of them dumped directly into a nearby creek. If you are reminded of the movie, *A Civic Action*, you're in tune to the situation.

I know this because a good friend of mine who attended high school there had breast cancer a while ago. Like so many others, she is a cancer survivor. Unfortunately, another statistic rings out from Gowanda. Of her graduating class of 1959, which numbered about seventy-five, eleven have died, with at least five succumbing to some type of cancer. As I write this, that number may have increased. The town is noted for a high rate of cancer, which seems to only point to industry. By now the cause-and-effect relation of business to sickness in an area seems like a never-ending saga.

Head back up north to 858 East Ferry Street in the City of Buffalo. The site is a vacant lot, covered with toxic industrial wastes, but unfortunately in the heart of a struggling neighborhood. The initial cost of cleanup was over a million dollars, but that was before evidence of further contamination was discovered.

Cleanup was to have been done by the city, but they decided that the state would do the work, since the site was placed on the Superfund list. Eventually, Superfund ran out of money, so 858 East Ferry Street sat with no remediation. The state did offer to pay for seventy-five percent of the cleanup costs provided the city pitched in the rest. Unfortunately, the latter balked and refused the offer.

In the meantime, people have been getting poisoned and sick each day. Activists have pointed to the high number

of occurrences of lupus cases in the neighborhood. Many of the health problems can be linked to the toxins in the Superfund location. Currently Superfund has been restored, but I'm not sure how much work has been done on the site. I did hear in early 2008 that 858 East Ferry Street was more fortunate than other areas nearby because of truly concerned leaders.

Travel north on the I-190 to the town of Tonawanda, another wonderful area marred by industry. As a kid, we used to travel along the Niagara River and take in the glorious smells of the tire plants and other industry that overwhelmed us. If someone had kidnapped me, blindfolded me and driven through this area, I would have been able to easily identify where I was. That's how pungent the aromas were.

While attending high school in Lancaster, a town east of Buffalo, I participated in the local science fair and produced a project dealing with the planet Mars. I was awarded a prize, and thinking about it now, my effort really wasn't that outstanding. I was the president of the science club at school – though I was never impeached. This membership may be why I have such concern for the planet. One of my favorite types of music is blues, so it would follow that I like the musical groups, *Roomful of Blues* and *the Blues Project*. Of course, when someone mentions the word, *projects* – referring to the homes in depressed neighborhoods – things aren't so rosy. I love *Manhattan* and wouldn't mind living there for a while, but rents are outrageous. Combining those two words to give the *Manhattan Project* results in something that wasn't good for anyone.

I promised a few words on this undertaking earlier. The endeavor was a secret effort of the U. S. government whose sole purpose was building the atom bomb. Oak Ridge, Tennessee was the area that created bomb-ready uranium, Hanford, Washington created plutonium, while Los Alamos,

New Mexico was the main location for the actual building of the bomb. Very few people knew about these locations, what was happening there, and this includes most of the actual participants, not unlike the workings at Rocky Flats, which would occur later. If you were assigned to the mission, you couldn't tell anyone what you were doing, not even your friends and family. In fact, you couldn't leave the place where you were working until after the assignment was finished. In effect, you gave up your life, and some individuals died doing it. When that happened, the next of kin weren't notified until after the war ended.

With the secrecy came the accompanying speculation. In the rather boring, much too long and too technical 2007 treatise, *The Manhattan Project*, edited by Cynthia C. Kelly, an interview with Roger Rohrbacher tells of what some thought was being produced in Hanford in the early 1940s. There was speculation that the facilities were slated to be Franklin D. Roosevelt's winter estate. A child at school had the best idea, when postulating that they were producing toilet paper. The kid verified this, stating, "My dad brings two rolls home each day in his lunch bucket."

Speaking of cleanup, all three major areas were a mess. I've already talked about the effect on the air, water, land and people, but the construction crews built the towns so quickly that the result was mud, everywhere. As you might expect, dust storms were quite common. It was no picnic and the living conditions were abominable, along with the discrimination, even though that was to have ended with the Civil War. If you were an Oppenheimer or Graves, you had a fine temporary residence, but otherwise you barely struggled to make it. There were long lines at the supermarkets – one of my favorite places – and criminals managed to escape punishment due to the nature of the setup. Fortunately, crime was limited, except for an occasional theft of paper for the bathroom.

I write about missing intelligence in a light and humorous manner in a few of my books, but in my mind, the Manhattan Project may have been the greatest example of this, minus the chuckles. Young people were involved at all levels to produce the atom bomb, with supposedly some of the greatest minds in the world. Did any of these geniuses have any forethought before proceeding? The people must have had some reservations about the process, but where was the intelligence?

The Manhattan Project was initiated because it was believed that the Germans also had the same mission. They did, but abandoned their efforts, so once more brains weren't functioning properly. You could say that there was missing intelligence – not technically true, since it was still around – when it was stolen by the Russians, who proceeded with their own destructive program. Had there been no startup in the United States, the Soviets would have had nothing to pilfer. There was certainly a great deal of missing intelligence on radiation, chemicals produced, the misuse of precious resources, disposal of what was being created and the effects on the planet and its inhabitants, before, during and after the building of the WMD. Indeed, hindsight is much better than no sight.

Los Alamos, Oak Ridge and Hanford were the major areas for production of those weapons of mass destruction, but other cities also participated, even if unwillingly. Some of them were the city of New York, Rochester, Wilmington, Delaware, Washington, DC, Chicago, Boston, Cleveland, St. Louis, Detroit, Dayton, Pittsburgh, Berkeley, California, Montreal and London. Sadly, my hometown had a few of those places in the area in which I grew up, even though *The Manhattan Project*, the book I mentioned earlier, briefly acknowledged that Tonawanda was part of it, but failed to mention either Niagara Falls or Buffalo. I didn't finish the book – I've got better things to read – but I checked the index. That's one of the reasons I don't recommend it. Also,

the book appears to be too favorable to nukes since many of the pieces were written by those who felt good about what they were doing.

On March 30, 2008, my sister's husband Lou mentioned that his late grandfather's estate was awarded a payment in a lawsuit. He was one of the many who died after working on the WMD stuff in Western New York. There's more information on just what was happening in Niagara Falls and at Bethlehem Steel in Lackawanna over sixty years ago in the link,

**[ask.ne.jp/~hankaku/english/niagara\\_fall.html](http://ask.ne.jp/~hankaku/english/niagara_fall.html)**.

As you can tell, Western New York is a dumping ground and as this chapter points out, there was no discrimination about what area was to be blessed with the chemicals and toxic waste. Numerous people – Lou's grandfather wasn't the only one – who worked in the plants outside Buffalo have died from radiation exposure. More than a half-century later, the problems remain, because cleanup and remediation have to be done. Thyroid problems are higher in Tonawanda than any control area.

You can now travel north to the town of Lewiston-Porter. This is the site of the CWM landfill, which will take anything that other parts of the country send. That's probably because this is the only licensed hazardous-waste landfill in the Northeast. From here, it's a short drive to Love Canal, which I spent some time on earlier. It's an even shorter drive to Modern Landfill, one of the largest in the area.

Residents are fortunate to have anthrax in their neighborhood, sent from the NBC television studios in the fall of 2001. At the end of 2002, the Buffalo News reported that NBC news anchor Tom Brokaw's anthrax-plagued desk had come to its final resting place in Niagara County. Brokaw's desk and other office furnishings were treated and buried at Chemical Waste Management's waste disposal facility in Lewiston. It probably won't help, but shortly after this breaking news, there was information that over two

million cubic yards of PCB-contaminated soil from the Hudson River might be shipped to the CWM landfill. That translates into 176,500 truckloads of hazardous waste or 150,000 pounds of PCBs, but the people don't want it. I wouldn't want it in my neighborhood. If you'd like it delivered to your neighborhood, contact the Hudson River people.

Naturally, CWM Chemical Services says that they have been handling waste for years and can take care of that from the Hudson River. And yet, we had Love Canal and all the other problems with toxic waste in landfills all across the country. If CWM Services still wants to be responsible for all this waste, they should set up a landfill far, far away from schools and neighborhoods. The better solution is to have those who polluted the Hudson River with PCBs clean it up and not send any of the toxic waste to anywhere near Western New York.

Bellevue, Hickory Woods, 858 East Ferry Street, Gowanda, Tonawanda and Lewiston-Porter are some of the neighborhoods where cleanup and remediation are necessary. They aren't the only ones in my hometown. Unfortunately, your city has toxic waste dumps and areas polluted by industry as well. It really doesn't matter where you live. So the question is, what can be done about it?



## 16. Renewable energy

What exactly is the solution to the energy problem? The answer lies in renewable energy sources which are politically, socially, economically and environmentally beneficial. These choices for energy include hydro, the ocean, hydrogen, wind and the sun. With further research, other alternatives to nuclear power, oil, gas and coal can be found. They just haven't been developed because no one has taken the time to look into these other possibilities. We need not rely on old technology and old ways of doing things. At present, cost appears to be a problem. I will consider that aspect of renewable energy a bit later.

The twenty-first century has automobiles that run without gasoline, and vehicles that use less fuel than the gas guzzlers on the road today. Electricity and hydrogen are already powering cars in a satisfactory way. Problems of the past have been overcome and development will continue to improve cars that run on these alternative fuels.

Some vehicles use a combination of fuels, such as gas and electricity. These cars can get fuel mileage of fifty miles to the gallon, by combining the advantages of each type of fuel. This is a far cry from the efficiency of SUVs and trucks. Another type of vehicle uses either hydrogen or electricity. At present the hydrogen is in gas form as well as solid, but hydrogen cars may be a way off. These new alternatives are also safer for the driver as well as for the environment.

The main difficulty is convincing people that vehicles powered solely with gasoline are a thing of the past. Over the years the automobile manufacturers have advertised their new products and had great success in moving people to buy whatever they produced. In many cases their modes of transportation were not only not necessary for the buyer, they were also inefficient, dangerous hazards on the highway and unfriendly to the planet. It is now time for GM, Ford and

Honda to stop producing gas suckers and promote the hybrid car and electric van.

In April 2007, I purchased a Toyota Prius. On August 6th of that same year, I added a page on my web site for the Prius report. I wish I could say that it sings the praises of that hybrid as well as the company that produced it, but that's not the case. I have very high standards and believe in excellence, something Toyota is only pretending to advocate. You can read more about what I have gone through, especially a failure by that corporation to support better high fuel efficiencies for automobiles, on my web site. Prius owners are welcome to email me.

From a previous chapter or two, you may recall my Honda Civic CRX and its great gas mileage, and that is one of the reasons for my dissatisfaction. In *Press 1 for Pig Latin*, I cover some of my unhappiness with the third Subaru I owned. Now that I think about that car when compared to the hybrid I own, maybe it wasn't all that bad. There is so much technology involved in the Prius, but much of the planning seems to have been done by someone with the intelligence of a lima bean. As a computer software person, it was always my belief that if something didn't work on occasion – that is, there was a bug in the program – the software didn't work. With that in mind, I have witnessed more bugs in the design of the screens and options within them than a termite-infested home. Other huge annoyances are the blips, bells, whistles and images that appear on these same screens. During a drive on some slippery roads in the winter of 2008, my vehicle experienced a bit of sliding – not really unexpected. All of a sudden, there was a small illustration on my dash pointing out this fact. I was obviously aware of the situation, so I didn't need another annoying announcement on my dash.

When a company has a chance to be a leader – as I write this, it is number one – but does a half-hearted job of it, I get furious. Of course, they have accomplices, as I pointed

out. My overall gas mileage in February 2008 after about 10,000 miles was less than forty-nine miles per gallon, almost two miles less than that from my Honda Civic CRX. The mileage has been going down for some time now. I'm very disappointed. In his excellent book, *A New American Story*, Bill Bradley mentions that if the Prius were made of lightweight materials, it could achieve a mileage of double what I'm getting. This compares with the plug-in hybrid, were I to convert my car at a cost of fifteen grand.

Better yet is Bradley's claim for the mileage of a lightweight plug-in Prius: one thousand miles to the gallon. Plug-in hybrids (PHEVs) are another great solution to replacing gas-powered vehicles. My web site has two links for electric cars. They are [sonyclassics.com/whokilledtheelectriccar](http://sonyclassics.com/whokilledtheelectriccar) and [pluginamerica.org](http://pluginamerica.org).

If you haven't watched the movie, *Who Killed the Electric Car*, there's more information at the first link above.

You may not believe the four-digit miles-per-gallon number, but there is no reason whatsoever for the mileage of all cars not being double what they are today. The car manufacturers don't want it and certainly the oil companies don't either. The people with intelligence – the American people – are demanding it. On my journeys I see many hybrids on the highway as verification of this thought. Yet, we need to make mass transit such a desirable option that people will abandon their cars – even hybrids – at least for much of their driving.

Because of its importance on a few levels, I will mention the Apollo Project in a later chapter. It is not the only organization that advocates a departure from fossil fuels. As I mentioned, we have plenty of alternatives. In many cases we have been erroneously led to believe that what we have now is the most cost effective means of energy. In developing countries, the cost of connecting to the electrical grid is so high that an alternative turned out to be

more cost efficient. German companies, such as the German Agency for International Technical Cooperation (GTZ), Solar Energy Systems and Wagner Solartechnik have introduced solar energy as a power source into the African nation of Tunisia. These companies are committed to spreading renewable energy throughout the world. Tunisia has been used to test their systems and by 1990, ten thousand homes in the northwest part of the country had solar energy. Renewable energy provides electricity without messing up the planet, creates jobs, uplifts the people and has a great impact on living conditions.

In Tunisia, in order to catch up with industrialized nations, using coal and oil for energy would have had a devastating effect on the environment. Renewable energy can solve that problem. Spreading the use of solar energy by the aforementioned companies does not stop in Tunisia. It is being brought into other African countries as well as North America and Europe. At the time I researched this, only one percent of the energy used in the world was renewable. However, with recent developments, this alternative is expected to grow by about twenty percent a year, and it can meet all the energy needs, if developed. The renewable energy age is here.

Besides taking advantage of the sun, Germany has also developed the wind as an energy source. The market for this type of power has grown thirty-five percent a year. In the 1990s, no one would have imagined that this would have been the case. Germany is not the only country taking advantage of the wind. The British Isles are a perfect place for using it because of its abundance. Just about any location you can think of can develop wind or solar since it probably has one or the other, maybe both. You can make all the excuses you want, but change now means our children and grandchildren will have a future.

The European Union has set a goal of twenty-two percent for renewable energy by the year 2010. In Germany,

many people are encouraged to use renewable energy through low rate loans. Italy, France and Spain are adopting the German model. California has wind and solar power as well, but it needs to be spread throughout the land. Many Americans feel that renewable energy is preferable.

As far as cost goes, many people choose the cheaper form of energy. They don't factor in the hidden costs of oil, coal and nuclear power. Solar and wind may appear to be more expensive, but not if you factor in long-term health care costs. The expense for alternative energy decreases with each passing day, soon to be a better choice than fossil fuels. Indeed, the long term needs to be considered. In order to reduce the costs of renewable energy today, governments need to really ponder the issues and allocate funds to this new, more environmentally friendly approach to energy. Subsidies of oil, coal and nuclear power need to be switched to the sun and the breeze.

Menlo Park in California is the site of the William and Flora Hewlett Foundation's headquarters, an exercise in energy efficiency. The aim of the building is to use recycled materials, add more natural light, create a healthier environment for the workers and save energy and water. The building uses thirty-five percent less energy and fifteen percent less water. It is true that this endeavor required higher costs than its non-green counterpart, but there are savings that can make up this difference over the years, including health care costs.

Insulation in this building comes from recycled denim. The roof has solar shingles, furniture is made from recycled materials and wood used in construction is certified as having been grown sustainably. This means that resources of the earth need not be used for these things.

Another building using the same concept is the new public library in San Jose. The total cost of \$7.9 million is about \$500,000 more because of the green consideration, or about six percent premium. Fortunately, some, if not all, of

the additional costs will be recouped before long, maybe even by the time you read this. More important, the experience in this building means that a similar one should cost only about two percent more than traditional buildings.

People who are in the construction business will complain about additional costs for going green. However, they need to look at the entire picture and see that factoring in health care costs – because a building is not completely safe with the old technology – as well as energy and water costs will mean that green buildings are indeed the better value. Today green technology is not used in enough homes, but the U.S. Green Building Council is working on that.

Not long ago, Greenpeace and Shell Oil were at war. Now the former and Shell Renewables are collaborating on renewable energy, specifically wind power. As this was written, the conglomerate was close to making money already. Shell is in the project for the long term, thanks to Greenpeace. The latter organization summed up its mission: “When the last tree is cut, the last river poisoned and the last fish dead, we will discover that we can’t eat money!”

## 17. This should be the start of something big

The government can help out in a huge way to make the environment cleaner. It doesn't matter at which level, either. Presently there are regulations that pertain to each industry but many of the corporations aren't following them. The monitoring agencies can do a better job at policing and punishing violators. The excuse may be that the staff is overworked, but that does not mean that more workers can't be hired. This development will also help reduce unemployment.

If someone says that there aren't any funds for hiring more individuals, that problem can easily be remedied. There are funds provided for the environment. Maybe they are not being used in the proper manner. Another option is to obtain more dollars for this very urgently needed department. This can be done by getting money from the polluters themselves. Companies that fill the air, land and water with toxins and don't follow required guidelines of the industry should be made to pay.

For the first offense, there should be a hefty fine and the corporation should be required to clean up the mess. There should be a warning of the fact that the fine will be even higher next time. If there happens to be a third violation, the fine should be completely outrageous, the company should be required to remediate the area, there should be a shutdown of the facility, and the offenders should be thrown in jail. Toss away the key and let the guilty parties meet their new cellmates. This may sound like a very drastic measure, but remember that the business had more than enough opportunity to do the right thing. Since they failed after all these warnings, they will have to suffer the consequences.

Since we are all too familiar with Rocky Flats, Cancer Ally and Love Canal, you can see that funding for these environmental departments should be an easy matter.

There should also be enough cash to see to it that the workers need not put in fifty-hour weeks to get their job done. In fact, regular funding from the government may even be decreased a bit. I believe that the people who pollute should pay for the cleanup as well as for any health problems their corporation has caused to the residents of the town.

As far as the corporations go, I have pointed out that they need to follow regulations already in place. Coming out with a product means responsibility for assuring that no unsafe byproducts are indiscriminately dumped into the water or the air or onto the land. Also, the product itself must not be hazardous to the health of the consumer. Lastly, when the product has worn out, the company must take care of its disposal. Any dangerous chemicals inside the goods should not be tossed into a landfill, but properly handled.

This might sound like a heavy burden for a company, but it will only safeguard the planet. The corporation can still make money, although maybe not as much as they could make by running their business without any regard for regulations. Of course, following the rules means that they need not fear lawsuits which could even close down the operation. In the long run, there's more cash to be made by the business in following guidelines rather than having the plant shutdown. I firmly believe that following the rules will actually make the company richer.

With these new environmental guidelines, let us look at some of the products with which companies may not want to bother, due to the liability. The first is bomb building. The process is very dangerous to the health of the employees. The product is very unsafe and I wouldn't want to dump the byproducts near the home of anyone, not even the president of the company responsible for the product. Lastly, the disposal of the unused bombs is troublesome, to say the least.

I spent an entire chapter on the building of the bomb but I failed to discuss one of the atrocious derivatives: land

mines. Even when the war is over, it's not safe to go outside because of what is left behind. The situation is not much better than being out of the house when bombs are falling. It is even sadder when a country ignores treaties that would help find these dangerous remnants of war.

Engineering advances do come to the rescue, from time to time. Aresa, a small biotechnology company in Copenhagen, may have the solution to ferreting out land mines. The answer is a plant that turns red when it encounters explosives in the soil. Assuming the plant will grow as successfully in the outside world as in the lab, individuals could dispatch the seeds to known troublesome areas, wait a few days and find the plants that are growing red. This approach is a much better alternative than having people or dogs do the searching.

Another troublesome product is the already mentioned pressure-treated lumber. Arsenic is a huge problem in the wood and the process to get the final result doesn't seem too safe. An alternative may be to treat the wood with some substance that is safer, but still lasting longer than ordinary wood. The result would be a non-toxic lumber that has no effect on the health of the workers in the plant or on the consumer. Another option would be to use regular lumber but cover the deck or playground with some finish that does no harm to people or the earth. Even if the wood doesn't last as long as the pressure-treated type, it is still a better alternative.

There is also another possibility. It is an alternative material made from recycled products. It's relatively new, and not long ago I saw two decks that friends of mine had installed that used this new material. The great thing about this new substance is that the deck is less harmful to people and the environment, but also utilizes materials that previously would wind up in the landfill. Not only is the product safer, it helps use up recycled materials rather than add them to the dump. It's only unfortunate that this

innovation didn't come on the scene sooner. Because it is a recent development, there may be some problems at first. Eventually those will be solved.

I have spent time discussing the harmful effects of chemicals and plastics, but there are alternatives, including types of the latter that are relatively safe. I use the term "relatively" because my brother doesn't believe any type is safe. He might be right, but we already have something available today to replace plastic, and that is hemp. Ratcheting up its production could have many beneficial effects, including ridding the planet of harmful plastic and creating jobs. The landfills wouldn't complain either. Obviously, this natural wonder substance may not solve all problems, but there is enough ingenuity in our world to arrive at various other substances that could easily mean plastic can be scrapped forever. A better idea would be to recycle it, if possible, even though some types are too dangerous for that purpose. With time, someone will even figure out a use for the toxic stuff.

What about a company producing vinyl? From our previous consideration, the process of creating this product should be closed down because of the danger to people and the earth. John Passacantando, executive director of Washington, DC based Greenpeace states, "There is no reason mankind should be producing vinyl chloride in this world." In order to stop the PVC production in this country, people need to stop using the product. That will send a strong message. At the same time, there are safe alternatives to PVC, and rather than terminating operations, a corporation could stay in business and produce a harmless substitute.

Greenpeace is building a house in New Orleans near North Prieur and Music Streets that uses materials that the environment welcomes. The siding will be Hardiplank, a fiber cement mix that looks like wood. It is cheaper than vinyl siding, but needs to be painted. That seems to be a good tradeoff, though. The pipes will be made of

acrylonitrile butadiene styrene and cast iron. The wood on the steps will be treated with alkaline copper quaternary preservative rather than arsenic. The wood for the frame will come from sustainable harvesting techniques.

With most houses comes a lawn and greenery. Companies that produce grasses may already have produced a type of grass that is more resistant to pests and weeds and also does not grow as fast. If not, this is something to develop. Fewer pests and weeds mean less spraying of toxic chemicals. Slower growth means homeowners can now mow the lawn once every two weeks. This saves on gasoline and harm to the environment. Weed whackers and lawnmowers have no pollution controls, so this innovation is welcome.

The chemical companies that handle lawns need to develop safer products. Spraying poisons on the ground hurts children, adults, pets, wildlife, the land, air and water. Changing to less harmful controls is worth it to these corporations because of the possibility of litigation. There is much that can be done in this regard, and this applies as well to chemicals that are used on fruit trees and vegetables in our gardens.

The automobile manufacturers need to do more than they have in the past. First, redesign the SUV to prevent rollovers and make it more fuel-efficient. Doubling the mileage would be a good start, since it's currently about fifteen miles to the gallon, if that high. The same idea pertaining to mileage should be applied to vans, trucks and cars. A boost of one mile per gallon in performance results in a savings of half a million barrels of oil a day. Just think what increasing a car's mileage by ten miles will do.

Above all, ban the Humvee and Hummer – we really don't need these behemoths on our highways – or at least remove the ridiculous tax deduction for these guzzlers and impose a surcharge to buyers. If you still care to drive one of these behemoths, you will have to pay dearly for the privilege. What the government should do is eliminate the

tax write-off that it allows for these means of transportation and instead grant it to hybrid vehicles, rather than downsizing and eliminating the latter.

I spent an entire chapter on vehicles that waste energy and pollute, so maybe it's time that we got rid of all SUVs. From the feeling of owners regarding these kinds of vehicles, however, that's not possible. Anyone who proposes that solution will probably get run over by one of these big monsters.

Using vehicles that run on alternative fuels is another great idea. At one time the government encouraged and almost mandated the idea of car pooling. Corporations should take advantage of telecommuting, which can also be a great help in reducing the use of gasoline. It will also reduce stress and road rage and keep the highways in better shape, meaning less maintenance. Some cities have adequate mass transportation systems, but many don't. We need to develop subways, trains and buses to such a high degree of efficiency that most people won't want to drive to work.

A very intriguing proposal comes from a group of labor unions led by the Steelworkers, Machinists and Electrical Workers. The Apollo Project calls for investing \$300 billion over a ten-year period to create new energy based on efficiency and innovation. This would involve energy-efficient buildings and appliances, environmentally friendly factories, hybrid vehicles and mass transit. The program would create three million manufacturing jobs and the cost for the entire project would be only a fraction of what the country spends each year on imported oil.

It is time for the corporations to produce hardware and software that is more reliable and longer lasting. Starting the process of recycling programs for their junk products is necessary. Of course, that would cost money and subtract from their profits. Nevertheless, a huge environmental lawsuit could do even more damage to their bottom line. One of the more encouraging signs over the last few years has

been the minimization of music CD packaging. It would be a good idea for the software companies to follow in their footsteps. The idea of having to upgrade software or hardware every six months or even every year is ludicrous, as is the idea of so many versions of a product. There should be one version of software that is user-friendly and “works,” not the unlimited number of issues that we see doing nothing more than lining the pockets of corporate executives with cash. This is only another instance of rewarding incompetence.

Regarding garbage and trash, there is some good news: work is being done to minimize pollution from the landfill. The state of New York surpassed set recycling goals in the latter part of the 1990s. This should help reduce waste. There are many recycling programs around today, but more needs to be done.

Planned obsolescence is great for the corporations, but hell on the planet. A company that takes this approach would do better to produce goods that last longer. The consumer would pay more just to be assured that the item wouldn't break down so fast. This would result in happier consumers, more satisfied workers and a cleaner environment. Some corporations have made great strides and they are to be commended. Cars are on the road much longer now. Research has paid off dividends: vehicles are made of materials that don't rust so quickly. Engines can easily last 150,000 miles with no problems.

Companies should provide free service to repair the product they sell so that it would stay in the home longer. There could be a small charge added into the cost of the item. Though it might cost more, the consumer would pay the price, because of what he is getting. Once the product is truly ready to be trashed, the company should take it back and properly recycle it. The corporations need to be more responsible for what they create. Technological improvements need to take the planet into consideration.

This might mean more delays and efforts in getting something on the market and smaller profits. However, when the cash flowing in is almost unlimited, the company can afford small delays in profits. The corporations and stockholders will still be content.

Finally, businesses need to achieve “truth in advertising.” Commercials have become so misleading that “false advertising” has become a pleonasm, that is, most are deceptive and nothing but lies. I have always felt that if you have a decent, reliable product, it will almost sell itself. You will need some marketing, but certainly not what we encounter today on the television and in the paper.

## 18. Every little bit helps

Thinking about global warming and the rape of the environment may lead one to believe that there's not much hope for the future, but we can do something. Despite all the damage, the earth is rather resilient, so we need not despair. Consider one person making a contribution by saving some energy, and then multiply that by 100,000 people. You can see that this will be beneficial to the planet. The earth can be saved if each of us pitches in, even if it is a small effort.

Start by lowering the thermostat in the winter to 66 degrees – or even lower, you'll survive – when you are at home and to 55 when you retire for the night or when you leave to go to work. If the room is still too cold for you, put on a sweater or flannel shirt. In the summertime, set the air conditioning to 75, rather than 64 degrees. Better yet, keep the air off and open the windows and use some fans. Just because you have a furnace and air conditioner doesn't mean you have to turn either on. You can still keep your beer cold in the refrigerator rather than along side it with the air cranked way down.

If you decide to have a house built, why not consider the idea of solar or wind power along with the usual gas, oil and electric? My former house outside Buffalo was heated on many occasions by solar energy, thanks to my delightful sunroom. I also had solar panels installed on the southern side of a home I owned outside Syracuse, New York. In both locations, there were times of the year when the sun failed to appear. However, when it made an appearance, I did save a bit on my heating bills. Then again, my heat wasn't cranked up high and my air conditioner was used sparingly. Again, a little saving of energy here and some more there will before long result in a significant benefit.

Speaking of the sun, if you are doing a load of laundry, why not use a solar drier rather than a gas or electric appliance for the same purpose? I heard that some

enterprising businessman was advertising this alternative for about \$50. For those who sent their cash, they received a clothesline. In your wash cycle, use cold water and you will save the energy needed to heat the water. Your clothes will still be clean. When you clean yourself as you hop into the tub, take a shower rather than a bath. That saves both water and energy. Cut down the time of your shower. You can probably do with five or ten minutes rather than half an hour. If you are a person who takes two showers a day, you should be able to get by with one. Perhaps all you need is a new deodorant or it's time to find a new job.

When you turn on the dishwasher, use the energy saving cycle if you can. Run the dishwasher with a full load of dishes, and if the machine isn't full, wait until you have more things to put into it. If you have an opportunity to start a compost pile in your back yard, do so. It will help to keep your garbage down as well as provide a great deal of nutrients for your vegetables and flowers. Teach conservation to your children and avoid all the waste that results when people fill up a plate with food they won't eat. Too many parents today accept the fact that it's all right for their children to leave food on their plates. It's a really bad habit and time to teach them otherwise.

Owning a house means you probably have a yard and a lawn to maintain. Even if you need to have grass, stay away from the sprays that endanger people, pets and the land. If you are going to have questionable chemicals sprayed on the lawn, why not put in Astroturf? The more grass you have, the more energy it will take to mow it. Even if you are not doing it yourself, remember that lawnmowers, chainsaws and weed whackers are worse than the automobile for our air and land. They have no pollution controls. An electric lawnmower at least doesn't use gas, but it still requires energy.

I'm sure you have heard men moan about having to fertilize the grass. In a few short weeks after doing that, they

will be complaining about cutting it. Well, don't fertilize it and it won't grow so fast, thus saving you all that work mowing. I never fertilized my lawns and they were green.

Unfortunately there are people who live to cut grass, and I'm not talking about the kind people smoke. These individuals are outdoors mowing twice a week. While out for a walk on Easter Sunday in 2003, I saw one of the neighbors on his tractor engaged in that same activity. First of all, that holy day usually occurs at a time when the grass doesn't really need to be shortened. Second, it was a Sunday, which at one time was supposed to be a day of rest. Third, I saw no difference between the grass about to be cut and that which had been mowed. Finally, it was Easter. Couldn't he wait until at least the next day to do his thing?

Not far away, there was one home where you wouldn't have seen grass being mowed that weekend. I'm not sure about the present – since I sold the house – but when I resided there, I made every attempt not to have to cut the lawn until May. There were times when I wished I hadn't delayed so long because the mower had to slow down because of the height of the grass. I also curtailed this suburban addiction in the fall by pushing my mower only when it was absolutely necessary.

This outdoor chore can be minimized in a few ways. As I already mentioned, don't fertilize your grass. It will still be green and grow, only not quite as fast. Secondly, rather than mowing every seven days, whether it needs it or not, set up a schedule of every eight or nine days. You can then make further adjustments as necessary. In this way, you will have more free time to do other tasks that your wife will assign you; you'll save on resources and the environment will be better off. The lawn I had was green for the most part, but not all of it was grass. Parts of it were wild flowers and wild strawberries, which could be harvested and eaten. There were the normal patches of the rabbits' favorite, clover, as well as oregano. That delightful herb, which was

quite prolific, smelled wonderful as you cut it. My lawn may not have been picture perfect, but it was green and I could walk, sit or rest in it without having to worry about toxic chemicals. You can't say that about many front or back yards.

People might claim that they can cut their grass whenever they want. Well, if you do it too often, it's really unnecessary work. Maybe some individuals should get new hobbies. I think people should use common sense in this matter. Also, show consideration for the planet. It's the only one we have.

Consider a groundcover instead of the green lawn. I had a species of flower called *ajuga reptans* that spread quickly and also had beautiful blue blossoms in the spring. After a while, the plants were so thick that weeds couldn't possibly establish a foothold and grow within their midst. This saves you the backbreaking job of weeding. There are plenty more varieties of plants that you can have instead of a picture perfect lawn contaminated by toxins. You will also be impressed with the beauty and fragrance of the flowers without having to worry about the air you breathe. I can assure you, you will get more comments about your perennials than about your lawn.

Trees and shrubs do a great job of helping environmentally challenged areas. For example, poplar trees and sunflowers are great for removing pollutants and restoring the land around us. In fact, it would be a better idea to have less grass and more trees and indigenous plants. Flowers can easily replace the grass and even help in insect control without pesticides. Birds can be attracted to certain vegetation and they in turn will gobble up some of the bugs. When you use pesticides, you destroy the weakest bugs of the species. Unfortunately, the strong survive and get stronger, even to the point that they soon become immune to what you are spraying. It's better to control pests naturally.

As consumers, we need to be more responsible and less selfish and have more concern for the earth. Purchasing an SUV or a Hummer will neither save resources nor help the planet. If enough people refrain from purchasing these gas-guzzlers, the message will be sent to the auto manufacturers and they will stop producing them. Thinking about the future, we should consider buying a hybrid or a vehicle that doesn't rely on gasoline as fuel.

We also need to use our brains as far as our driving habits go. Not long ago I joined a church choir that a good friend recommended. He lives less than two miles from my home. Rehearsal is every Wednesday evening, and then the group sings at Mass each Sunday, except during the summer months. The commute is about five miles. We would take turns driving whenever it was convenient. You may think that this doesn't save much energy, but if more people did it, there would be a lot less gasoline used. This really becomes a factor when gasoline costs \$5 a gallon, which may soon be the case.

When you head out the door to go shopping, you can help the cause by doing a bit of planning. For example, if choir rehearsal is on Wednesday and the grocery store is close by, why not combine the two trips rather than sing on Wednesday and shop on Thursday? It takes a bit of effort, but it will help. Another suggestion is to walk to get a DVD or video rather than drive if the store is half a mile away. If it's two miles from home, why not get on your ten-speed bike instead of turning over the ignition and wasting gas? In each case you will help the environment and you will be getting some exercise. You are a winner on both counts.

When you get on the highway, observe the speed limits. There's a reason why it's only 55 mph. It has to do with the traffic volume in the area. There's another benefit to obeying the law. You'll get better mileage, save on gas costs and less energy will be used. You will also not have to worry about getting a speeding ticket.

I talked earlier about using toxic chemicals for household chores, but you do have a better alternative. Some time ago I lived in a house that had three toilets. That was very convenient but it also meant more to clean. When I moved into the house, I found the toilet in the master bedroom to be caked with crud. I tried a few agents but with no luck. Chemicals didn't do anything – today I have few if any – nor did bleach or any other cleaner. I was going to buy a new commode or at least a new bottom part, but somehow I didn't.

One day my mom suggested using vinegar. Since I had other bathrooms, I could pour some into the bowl and let it sit for a while – time wasn't a problem. I put a quart or more of the vinegar into the bowl and let it do its thing. I am not sure how long I left it there, but after a time the bowl was good as new. The vinegar did the job, something all those other products couldn't do. Moreover, the environment was not polluted.

I heard that adding a combination of vinegar and baking soda will clear up a slow drain. I did try that suggestion a few times and it surely does work. On one occasion I was to have guests over for dinner. About two hours before anyone arrived, I noticed that my kitchen sink was plugged and the water just sat there. Running my garbage disposal didn't help in the least. I was in a bind and didn't have time to call a plumber so I drew as much water out of the sink as possible and decided that I would use paper plates and plastic – I know all about the hypocrisy here – to serve the meal.

I poured some of the vinegar and baking soda combination into the sink and let it sit. I had no choice as it wasn't going anywhere. The dinner came out fine and later in the evening I noticed that my sink was fine and there was no need to call a plumber. Actually, the combination of the vinegar and baking soda not only clears up a slow drain – which I knew it could do – it also has the power to open up a

stopped drain. Who needs Drano? Vinegar also adds a great taste to quite a few dishes.

Another suggestion that each of us can do is to move away from a “flea market” society. People really don’t need to buy all those things they see at a yard sale. I’m sure you’ve heard the expression, “We buy junk – sell antiques.” Well one man’s crap is another person’s treasure, but it sure creates a lot of garbage and loads up the landfills.

Try to eliminate certain purchases, especially ones you don’t need. It’s important to know the difference between “want” and “need.” You can certainly live without many of the purchases that fill up the shopping cart. Stop trying to keep up with the neighbors and all that they have. Getting a new PC every year or six months doesn’t make any sense. I have already mentioned the danger of throwing away PCs and electronics products into a landfill.

Instead of cable TV, get out of the house and check out the sounds and sights of the seasons. If you don’t like snow, try cross-country skiing and you’ll almost not mind the white stuff. If you don’t care for that idea, join a singing or environmental group. You’ll enjoy it and the winter months will pass by much quicker, I can assure you.

Turn off the TV one night each week. If there’s one program on that night that you just can’t miss, use your VCR and watch it some other day. Recording a show means you can fast-forward through the commercials and save time. On other nights, limit watching for yourself and your family to two hours, rather than have the tube on from the time you get home until the time you retire for the night.

Reduce your cable bill, too. Instead of moving from 50 channels to 150, go from 50 to 20. If there is nothing on that you care to view, turn off the set and read a book, rather than channel surf. You’ll save on electricity and expand your knowledge as well. Avoid going from one station to the next with the remote by checking the TV guide for a list of programs. If you can’t find anything of interest, don’t even

turn on the TV. You can even lower your electricity bill by using a power strip, which means your TV won't be on even when you shut it off.

Speaking of books, instead of going to Barnes & Noble or Borders Books all the time, join the local library. It has a large and excellent selection of reading material, including the latest best sellers. There's a good chance you can find any book you want, even if you have to wait a few days after ordering it. Most likely the book you request can be delivered to your branch library so you can save driving time and energy. You may even be able to walk to the library. I have two branches near me – one two miles away and the other a bit less – and I've walked to both, even in our winter in Buffalo.

You'll also find that the library has materials other than just books, such as DVDs, videos and CDs. Thus you won't need to buy these things, when you can borrow. Just make sure you return the stuff on time, otherwise you will have to pay a late fee. Since the number of movies is endless, why buy a flick, watch it and then let it sit on some shelf? Sharing makes more sense environmentally. Also, if you don't own the movies, you won't need to buy shelves for them. Buying less minimizes the size of the landfill and saves resources.

Unfortunately, we may need to buy a product that ultimately winds up in the garbage. One such product is the disposable diaper. The more sensible choice is to use cloth instead. Of course, then you have to launder them and in the process you'll be using resources such as electricity and water. You can save some energy by using cold water. The choice of cloth diapers is the better one. It's probably not a good idea, however, to feed the baby less so diapers will need to be changed less often.

If you are still not convinced that disposables should be avoided, studies have shown that there is a seven percent rate of diaper rash with cloth, compared to fifty-four percent

with disposables. A study published in the October 1999 issue of the Archives of Environmental Health found that laboratory mice exposed to various brands of disposable diapers suffered increased eye, nose, and throat irritation, including bronchoconstriction similar to that of an asthma attack. The mice must have looked strange in diapers. The study also recommended that mothers and children with asthma avoid disposables, citing the presence of dioxin in disposables, and the fact that each child puts two tons of untreated human sewage, paper, plastic and chemicals (including the “gel”) into our landfills. Disposable diapers are not regulated by the FDA, and a chemical implicated in the Toxic Shock Syndrome fiasco thirty years ago, which is no longer used in women’s products, is still used in disposables.

There’s more information about disposable diapers at **[webhome.idirect.com/~born2luv/environ.html](http://webhome.idirect.com/~born2luv/environ.html)**.

When you check out at the supermarket, you will be given the choice of paper or plastic to carry your food home. Recently, someone told me of the outrageous number of plastic bags that are used in China each day – which I can’t recall – but they’re not the only nation. I spent an entire chapter on the unworthiness of plastic, but if you use paper, another tree needs to be chopped down. Both have disadvantages and fortunately there is a better option: reusable cloth bags. Some grocery chains charge you for cloth bags, but allow you to bring in your own. This is a great idea that saves you money and helps the environment at the same time.

We also need to move far from our current “battery society.” There are too many things that rely on that type of power, such as cordless phones, clocks, smoke detectors, toys, games, boom boxes, flashlights, radios and remotes. The children of today could truly be called “battery kids.” And yet, when the Game Boy doesn’t work anymore, where

do the used batteries go? They go into the trash, which then winds up in the landfill.

The makeup of this small power source means that there is more contamination of the air, land and water at the dump. But what can we do about it? The answer is to dispose of the cells properly. There are places that will see to it that they go where they should. Check out the web site, **wings.buffalo.edu/ubgreen** for further ideas when you don't know what to do with an object and don't want to trash it.

Another idea is rechargeable batteries that can be used over and over. This will help somewhat. Maybe we need to develop a new source of power that lasts longer and that is more earth-friendly. Above all, we need to dematerialize, using fewer gizmos that require these power sources.

I can't emphasize enough the principle of recycle and re-use. If you can place an object in the recycle bin, put it there rather than in the trash. Today, even junk mail and just about any kind of paper can be reused. If your town doesn't have a recycling program, call the town board and ask about it. There's money to be made if recycling is done properly. I don't think too many municipalities will turn down a chance to make money! I have some great ideas for what to do with ever-proliferating junk mail in the second sequel to *for seeing eye dogs only*, my humorous look at missing intelligence, which I hope to have published in 2009, maybe sooner.

There are further suggestions in my book, *Tick Tock, Don't Stop*, which was published in 2003. If you don't own a copy of the book, buy one. You may think that what you are doing is a tiny effort but it may make a big difference in your life as well as help out the planet. There's more information at my web site, **bobcooks.com**.

## 19. Doing even more

There are quite a few grassroots organizations that are dedicated to preserving the planet. The town in which I lived during my youth has a web site called

**checkoutcheektowaga.4t.com.**

Even if you don't live in Western New York, you can browse the site for ideas, especially if there are health problems where you live. The Citizens' Environmental Coalition (CEC) is a New York state organization with a site called **cectoxic.org**. You may also want to check out the site they developed called **ecothreatny.org**.

This coalition works throughout the state and is responsible for assisting individuals and groups who don't know where to begin when it comes to dealing with environmental problems. Not long ago a train of garbage was stationed in Buffalo, and the owners had no intention of moving it. One individual decided to take action to get the stench and material removed, but she was new at it. However, she did talk to the CEC and they assisted her to the point that the problem was solved.

The state of New York has thousands of toxic waste sites where dangerous industrial by-products have polluted the land, air and water. These can bring exposure to chemicals that are known to cause cancer, reproductive dysfunction and neurological problems through contact. These polluted areas are called Superfund sites and I doubt there is a state in the nation or country in the world without such toxic locations. These areas may be the result of the bomb-building process or simply a result of production of some kind of toxic substance.

Recently I logged on to the useful but disturbing web site, **nypirg.org**.

This is a New York site that indicates where Superfund sites can be found, based on an entered zip code. I didn't really want to get the bad news, but the information

was there for me. The home from which I recently moved was outside the city of Buffalo in the suburbs and I found that there were two of these places within three miles of this house. One was a major corporation and the other a small business that specializes in dry cleaning. From all indications, you can't escape these hazards, no matter where you live. I did mention that the site was helpful but not reassuring.

You may have seen the movie, *A Civil Action*, or read the book. The proceedings revolved around pollution of the water supply due to the proximity of a tannery in Woburn, Massachusetts. I accessed their site, **[northshoreonline.com/Woburn](http://northshoreonline.com/Woburn)**, since my brother and his family had lived there.

By the time you read this, some of the sites mentioned earlier may not be available or changes may have been made so you won't find the information you're looking for. If so, you can Google what you're after, and most likely you'll get more hits than you may want to pursue.

Another site to visit is **[newdream.org/turnthetide](http://newdream.org/turnthetide)**.

This one fits right into saving the earth and its resources. Of course, there are other sites with the same outlook. If you need specific information about a particular problem or subject, you can probably get help by going to any of the above sites and emailing the parties. Internet searches on the Web should provide a good start.

Recently I watched a feature on public television entitled, *Affluenza*, produced by John DeGraaf. I had the pleasure of meeting this distinguished gentleman in the fall of 2007 at a World on Your Plate Food Forum in Buffalo. John gave an outstanding keynote address that day. He is also the editor of *Take Back Your Time*, which is tied in to *Affluenza*. If you didn't watch the program, you can check out the web site, **[pbs.org/affluenza](http://pbs.org/affluenza)**.

This site should give you some ideas about making your life better. Affluenza, a close relative of materialism, is one of the main reasons why the earth is getting polluted and trashed. The more serious the disease, the more yard sales, flea markets and junk.

Getting involved in your town could mean getting into politics. It could also signify that you care about the environment by joining a grassroots organization. If the group already exists, and there is a good likelihood that it does, you're in luck. On the other hand, you could be the pioneer, just like Lois Gibbs was a quarter century ago. Fortunately, help should be available so you won't be going it alone. Lois may have since left Western New York, but her mission of making the planet safer each day continues. Not long ago she introduced the "Be Safe" campaign. It encourages industry, but not at the expense of harm to the planet. You can find more information at the web site I referred to earlier, [chej.org](http://chej.org).

If you are part of an environmental group, you may have heard of the Bucket Brigade. This is a method for capturing samples of the air where you live. Naturally there are strict guidelines for the entire procedure, but it is a good way of monitoring the air near the industry in your community. Denny Larsen of the Refinery Reform Campaign is the person who got the whole concept going in the mid 1990s. He is a community organizer with twenty years experience, having worked with refinery and industrial neighbors.

There should be no need for the Bucket Brigade, provided industry follows regulations and makes sure that all processes of production are safe. Unfortunately, corporate goliaths care only about green – and I'm not talking about the environment here – and have no concern for the earth and its inhabitants. Now more than ever, they have almost unlimited power in winning over politicians and regulatory groups that should be protecting communities.

The Bucket Brigade can shift the balance back to the people. A specially designed five-gallon bucket is set up to capture a sample of air, which is then sent to an authorized laboratory for analysis. The whole effort of obtaining the sample is carefully monitored and logged, not unlike the procedures followed by the police on a crime scene.

This is how it works: people notice a horrifying stench similar to rotten eggs. The gas is probably hydrogen sulfide, a very harmful substance. A group records the time, date and approximate location of the odors in a logbook and then photographs the capturing of the air sample. Once the plastic bag is ready to be shipped to the lab, another document is filled with time, date and signatures of people who have been involved. This same sheet will be transferred to Federal Express, who will sign it and include it in the shipping. Thus, every moment of the process will be accounted for and the laboratory will send the results in about a week. Note that you strengthen your case by keeping plenty of logs by various members of the community and videotaping strange sights at the business site. The more proof you have, the stronger your case.

Naturally the company spewing out the hydrogen sulfide will argue that there's an error in the reading that was taken. The only problem is that a certified lab shows the results, which appear to be more reliable than any of the company's monitoring, if they do any checking at all. With this situation, it appears that someone is lying and it doesn't seem to be the lab. Having the corporation do another test probably won't help anyone, so a regulatory agency will have to be called in to do some monitoring. Most likely their results will agree with the Bucket Brigade sample.

Making the buckets takes a bit of doing, as will the air-capture procedure, but Denny Larsen will come to your aid. The buckets aren't too expensive, but the lab costs might be outside your budget. Fortunately, funding is available and grassroots organizations can be of assistance. You can get

more information from the web site of RRC at **[refineryreform.org](http://refineryreform.org)**.

If you have an ally with the local media, you will have more power against the corporate polluters. If you don't have any contacts in the press, it shouldn't be much of a problem getting one and drawing attention to the pollution in your community. You may be able to get support from the local politicians, although they may ignore your findings. There is a good chance that you can contact someone in the city government who is concerned about the environment and your problems.

No matter whether you are a leader or follower, the work at hand will be difficult and filled with frustrations. To begin with, your group may be going after a corporation that is destroying the air, soil and water of your town. That can only mean that they have violated some of the laws and guidelines for doing business. So you are stuck with policing this company, which you really shouldn't have to do. You may ask why the Department of Environmental Conservation, the Environmental Protection Agency or the Department of Health hasn't been on this corporation's back. It is their job and really not something you should have to do. I did mention that you would be discouraged.

It is possible that you could contact one of the environmental monitor groups and let them know of the difficulty. You may then be able to work with them to clean up the air. Of course, if they are short-staffed, they may not be able to help. You could then try the town board. They may be of assistance, but maybe they could care less about your concern. Perhaps they don't want to cause problems to this company since it employs a great number of people in the area. The politicians could tell you they will look into the difficulty, but then not do anything about it. Once again, you're on your own.

By getting involved, you will run into other setbacks. You could talk to your neighbor about the illness in your

town and she might also be suffering, but may not want to take action because her husband works at the plant. Thus you may have lost an ally. What could be worse is if the woman goes along with the cause but her husband doesn't. This could cause bickering between the husband and wife or even something much worse.

You may be branded a troublemaker in town when all you really care about is the health of the inhabitants and the concern for clean breathable air, adequate drinking water and soil suitable for growing vegetables. Pursuing your cause may even result in family members giving you the silent treatment. Of course, that should never happen, but if it does, you'll have to accept it and move on.

You will also be disappointed when you attend a meeting of your group and see that few others show up. You need to remember that the weather could be a factor and some people have put in a full day of work and are tired. Others may be too sick to join the group. It has been said that if a grassroots organization gets ten or fifteen people for the meeting, that's very good.

You should have support for what you are doing from your family, friends, neighbors, group members and others from similar groups in the area. But there may be bickering within your group. That doesn't help matters. Obviously the management and work staff of the corporation you're after will not care for your approach. The same feelings could be shared by the town board, although you might have one or two people on your side. If you demonstrate in a peaceful manner outside a facility, people can yell at you, call you undeserving names and even do worse.

If you have any kind of illness, it will make your struggle all the more difficult. Even if you are in good health, you can still get run down and discouraged, especially if neither a politician nor health department official sides with you. It's a tough fight, no matter how you look at it. And yet without your effort, these polluters will

continue to get away with violating the law. With time, patience and good effort, hope and action can turn into change for the better.



## 20. The Future In Our Hands

In the summer of 2003, I joined the St. Joseph University Church Contemporary Music Ensemble (CME). A good friend of mine had joined and encouraged me to do so as well. I had sung in the glee club at Canisius College as well as in two church choirs and four other choral groups in New York, Florida and Connecticut. I was also aware that there was a social justice committee at St. Joseph Church that dealt with many issues. I soon found a second family.

Before long, I met some great people in the CME, specifically Sister Linda Glaeser, SSJ and her niece, Michele Sprada. They had just returned from a trip to Kisumu, one of the four major cities of Kenya, where they spent more than a month among the people as part of the Future In Our Hands (FIOH) project. This endeavor originated in Norway and encompasses a few countries. It took some time, but it is finally in the United States.

Before Linda and Michele left home, they were told that they were crazy to go, giving up all those comforts. After all, the area where they stayed would have few if any automobiles, cell phones and no cable TV. How could anyone live without a Tim Hortons? Most of Africa sees the effects of malaria, typhoid and cholera, not to mention what AIDS and poverty have done to the people. The east coast nation of Kenya is no exception. Nonetheless, they were interested in the journey and invited to come. They were also told that they would be put to work and they were on their way.

The effect they had on the natives was overwhelming, and Linda and Michele were showered with love, concern and appreciation. On the other hand, they would never be the same after their trip. They were touched and moved, and on arrival home, they would let others know about Kisumu. Poverty, AIDS, malaria and other diseases weren't wiped out by their visit, but the situation was

improving. Both women spent their time in Kenya teaching and doing as much as they could to help the men, women and children there. In addition to their physical effort, Linda and Michele also delivered financial help from willing benefactors.

Linda is a physical therapist for the Sisters Hospital's long-term home health care program in Buffalo, New York. While in Kenya, she taught other professionals so that they could, in turn, administer to others. This would enable the five local physical therapists to do their job more efficiently after she departed. The building and equipment therein were minimal and in need of upgrading, but she managed with what was there.

Besides her physical therapy efforts, Linda also volunteered her time in a hospital in the village. Facilities and supplies were minimal at best, not unlike the physical therapy building. There were few doctors and nurses, and patients were taken care of by their immediate family. Relatives provided the bedding and clothing as well as did tasks that nurses' aides would perform in the states. It was not unusual to see two children in a single bed.

Michele is a second-grade teacher at Lindbergh Elementary School in Kenmore, a suburb of Buffalo. Much of her time in Kisumu was spent in the education of the children. Until the year 2003, the children there had to pay for their schooling. With a new president in Kenya, that changed and elementary school became free. There was one stipulation: shoes and proper attire were required.

There was another problem as well. Since many children had not been attending school for so long, the new free education resulted in larger class sizes. Before, it may have been fifteen or twenty students. Now the group swelled to a hundred, as those who were left behind entered school, despite their age. This condition meant that the instructors were overwhelmed with more work than any teacher could handle. Fortunately, they took on the task and the students

were appreciative of the situation. All they wanted was to learn. Still, a few more teachers would certainly have been welcomed.

As far as high school and college, there was a cost of \$300 per year, a far cry from the cost of attending Harvard or Cornell back in the United States. That amount has gone up slightly, by \$50. Of course, even the \$300 fee may as well have been \$100,000 as far as some of the people of Kisumu were concerned. Surprisingly, families would somehow scrape together the dollars to send their son or daughter to continue his or her education. For those who couldn't afford the money, there was always the possibility of getting a sponsor.

Kisumu still experiences a shortage of teachers and books, but things are progressing. The children love to read but there aren't enough materials, as one textbook is shared by three students. Michele and Linda were responsible for getting more books into the schools and the youth were delighted. Amazingly, the cost to supplement reading material is incredibly low.

There is also education of another nature taking place for all the population. It has to do with AIDS awareness. Adults try to bring home the point that this plague can devastate anyone, but there are ways in which it can be avoided. Abstinence is preached and multiple sexual partners are strongly discouraged. This is done through the spoken word as well as through music in song and dance. Anything that will strike a chord is used to allow people to live longer, free of that horrible virus. In the process, preaching morality is avoided in favor of common sense, despite the fact that the majority of the people are Christian and the churches are usually overflowing at Masses lasting two hours.

Besides therapy and school, Linda and Michele also had a stint as doctors. They are not qualified as such, and it was not their intention to minister in this field, but somehow the citizens of the town assumed they were medical people

who could cure their numerous illnesses. As it turned out, the visiting women only wanted to visit the site of the new health center. They had some aspirin with them, but that was about it. They sent a messenger to a neighboring town to procure antibiotics and drugs that could be used for the sick.

In addition, there was a nurse available who could assist in translating the native tongue. In this way the ailments of the men, women and children came to light. Once the medicine arrived, Michele and Linda brought some relief to the suffering of the village.

Kisumu and the nearby villages of Kenya are so poor that things we take for granted are barely to be found there. The major causes of most diseases in the country can be blamed on the lack of clean water and proper sanitation. Before their trip to the area, Linda and Michele were looking forward to meeting a young boy named Nevil. He was sponsored by Sisters Hospital Long Term Home Health Care. When they arrived at the village, they were told that he had died. His death was a result of contaminated water. So even though he had a sponsor and was in school, he died because of a lack of the more basic need of clean water. Providing for a person is great, but what good is it if that individual perishes due to inadequate resources in his country? Unfortunately, Nevil wasn't the only one who died due to a lack of drinkable water.

Basic necessities are what are needed in Kisumu and the other towns nearby. The men, women and children don't crave cell phones, personal computers or SUVs. All they ask for is water, food, education and work. After the rains there is plenty of water in the ditches, but it is not wholesome. Some of the "more affluent" collect rainwater in cement barrels, but that doesn't help the majority of the population. More wells are needed. The cost is high, but they do provide water as well as employment for those in the village. The cost is \$2500 per well, but it goes a long way, eliminating

sickness and really helping the people, by creating jobs and hope.

When Michele and Linda returned to Western New York that summer, the Kisumu villagers were literally rained down upon with miracles. Word spread of a need for wells and it wasn't very long before generous people sprung for the funds and soon more money arrived for three more wells. It doesn't take much to bring about change and improvements.

In another part of Kenya, a great example of what can be done using what's available is happening in the Kilifi district. That region of Africa is very arid so growing anything is a challenge. However, a humble little bean, the "cowpea," survives under these conditions, with little need of water. You may refer to them as black-eyed peas, but they are filled with protein and provide nutritious meals for the families of the area. An added bonus is that this is a local plant and the farmers can harvest the crop and earn a living at the same time.

As already pointed out, AIDS is a huge problem in all of Africa and approximately 500 men, women and children die from it each day. There are also many people sick or dying from malaria, typhoid, tuberculosis and cholera. There is no cure for AIDS, but with some education that is taking place, the spread of the disease can be controlled. For the other problems, medicine can cure the sick in many cases. The encouraging fact is that just a hundred dollars can work wonders in Kenya.

The city of Kisumu is in sharp contrast to the cities of Chicago and Los Angeles. Food and medicine are in short supply in the former, so little is wasted. This is not so in the cities of the United States, where the garbage cans and landfills relate the story of opulence. Education is needed to help the people live longer and healthier lives in Kenya. At the same time people in Chicago and Los Angeles need to

learn how to protect the air, water and land before it is too late.

Sadly, Kisumu is not a unique situation. Other examples of dire poverty and disease can be found throughout Africa and the rest of the world. It may not be as hopeless, but this scene plays out in the United States as well. On the one hand, the people of Kisumu live short lives, but their wants are few, unlike the inhabitants of technological societies, who never seem to get enough.

This city in Kenya can give all the earth some wonderful examples. To begin with, Linda Glaeser and Michele Sprada are an inspiration. Their work should lead others to give to the less fortunate as well as to make sacrifices so that there is less waste on the planet. Just as the people of Kisumu take advantage of what they have – they don't have much – we too should recycle more and minimize our trash. We really should make a serious effort to understand the difference between a “want” and a “need.”

The Kisumu men, women and children may not have much, but they are a happy, loving and appreciative people. They don't need cable TV or personal computers. Their lives center on the family and they take care of one another, even those they just meet. Perhaps it is time for us to realize that a simple life is ultimately a happier one.

Most importantly, we need to realize that there is no need for all the poverty in Kisumu or in other cities on the planet. We have the means to eliminate it. If two women from Western New York can have an impact on a city in Kenya, there is no limit to what the rich nations of the world can do to make the world a better place for all mankind. All it takes is action on the part of the financially advantaged.

Yes, there is hope for the future. Water is being made cleaner and great strides are being made in education. Teachers, parents and students are doing more for the area in which they live. Success will not be achieved if each of us

fails to participate in the struggle. With some effort, we can take back the earth. The future is in our hands!



## 21. Hope, not despair

In my journey as a writer, *I Don't Want to be a Pirate*, one of the pieces of advice I give to would-be writers is to never give up. Don't lose *hope* – I use that word enough times in that 2008 publication – even when the pigeons find you. Some people tell me that certain deposits falling down on you from the sky are actually good luck. As I write this, we live in trying times and moments that can lead to despair. Simultaneously, there are great signs of hope.

In early 2008 I subscribed to a magazine called YES!, which I don't think any home should be without. You can subscribe by obtaining information at [yesmagazine.org](http://yesmagazine.org).

I also sent the magazine a copy of my 2007 book, *This Page Intentionally Left Blank*. I am convinced that I did the right thing and consequently sent them another of my books. The writers of YES! don't settle for the status quo, but preach vision and progress through innovative thinking. They also point out that all around us are great movements that can change the world. Just as it won't be long before the Cheney-Bush regime is history – hallelujah – the old way of doing things is passé as well. I mention in both my books on work that working smart beats working hard any day, and that's only a beginning. Make way for a new generation of living, featuring alternate energy, a shorter, reasonable workweek, Sunday as a day of rest, people living on a planet without war and technology done right. It won't happen overnight, but the time is coming.

The signs abound. Each issue of publications of such progressive organizations as the Sierra Club, the Wilderness Society, the Natural Resources Defense Council (NRDC), the Nature Conservancy and CHEJ offers encouragement and good news of the environment winning out over the greed of the corrupt corporations. In their minimal wisdom, the latter can't seem to understand that not only can the corporate community and the planet work alongside each

another, profits can increase above what is being garnered today. Without this coalition, there may not be worries about global warming because there won't be any citizens of the earth or resources, and hence no taxes will be collected – nor will there be a need for them. It really isn't that difficult a concept to understand. Governments, as well, should get on board before they are sent to pasture – or to lobby – for not serving the people who elected them.

Recent good news has been reported and probably will continue. Swallows and skylarks returned to the site of Chernobyl's environmental disaster only a year later. In Ecuador, the Cofan indigenous group finally was granted ownership of their ancestral lands in the Amazon, after centuries of struggle. In 2007, voters in Oregon overturned a law that would have given free reign to developers and timber companies, endangering important habitat across the state.

The NRDC led the way in protecting the whales against the deadly sonar of the U. S. Navy, which will now take significant action to move their exercises out of harm's way of the creatures of the sea. This organization also won a \$4.6 billion lawsuit against American Electric Power for the company's environmental violations. The auto giants were dealt a setback when their attempts to halt an increase in gas efficiency for light trucks and SUVs were halted by a federal appeals court.

Many groups are indeed working together to show that green is better than greed. One letter can make a difference. The Green Festivals will once again be held this year in Seattle, Chicago, Washington – near the scene of the crime – and San Francisco. Last year, I considered participating at the latter location and traveling there via rail. Because of other considerations, that never occurred. In 2008, I haven't ruled out visiting Chicago or the west coast for one of those events. If I go, I will leave the driving to Amtrak.

Becoming a part of these groups will give you more insight, hope and should lead you to work for the betterment of our planet. It is also imperative that we the people get involved and nudge these organizations to do even more, since the Iraq War reached its fifth anniversary, but people are still dying. This is despite the fact that the majority of the American people voted in the 2006 elections to bring them home, now. Wasn't anyone listening? Anyone who wants your money to help save the planet should realize that ending war as we know it, is the best thing for the earth. I challenge the NRDC, Sierra Club, the Wilderness Society and other groups to take action to do something since the worst enemy of the earth is war.

There's a host of information in the magazines that conservation groups publish, as well as suggestions for books that you might care to read. I have mentioned a few already, which you can find at the end of this book. One I highly recommend is *Crimes Against Nature* by Robert F. Kennedy, Jr., the founder of Waterkeeper. This is a group of worldwide organizations that is dedicated to preserving the water in the oceans, rivers and lakes. Branches can be found across the globe – there's one close to you – since without clean water, civilization will perish. You might feel that we also need an Airkeeper, Landkeeper and Global Warming Arrester, and you're probably right. Kennedy became involved when he found that he couldn't take his sons fishing in the local waters where he lived because of the pollution.

It is our responsibility to forget the excuses, not give up and be part of the solution. Kennedy is one person, but there are many others who have stood up and lead others against the polluting corporations. I mentioned a few of these inspirational people in my 2007 book on work.

Pete Seeger is another great inspiration as activist, environmentalist, teacher, singer and former Communist. In my book, he's excused because there are some good things

in that belief system. You can find his interview in the Spring 2008 edition of YES! Pete was blacklisted for so long a time that much of his success was unnecessarily and unjustifiably delayed. Even that didn't stop him from singing and preaching about the good that music can do to accomplish great things, including his efforts on the sloop, *Clearwater*. You can find that vessel on what had been – thanks to big business – one of the most toxic rivers in the country, the Hudson River. It is through the efforts of these two leaders that the waters there have improved.

If you haven't viewed the Seeger documentary on DVD, it is the story of a great patriot and should be inspiration enough to remove yourself from your starchy couch and into action. He mentions that people working together can work miracles, even against the giants of industry. The latter may impede a single group, but with so many different organizations today working for the air, land, water and people of the planet, they will find it impossible to stop them all. Margaret Mead reflected that feeling in the words, "Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it's the only thing that ever has."

Another individual whom I hope to meet this year is Jim Hightower, a former politician who works for the people and encourages everyone to get involved. That's the only way for things to change. He has written a few books, which I recommend highly. Reading them should make your blood boil while simultaneously giving you hope and many laughs. His latest book, *Swim Against The Current: Even A Dead Fish Can Go With The Flow*, was written with Susan Demarco and came out in early 2008. He has a few great quotes, including this memorable one: "Even the smallest dog can lift its leg on the tallest building."

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